# Generic Trade-Off Internal Links

### Sectors Trade-Off - Funding

#### Sector trade-off is zero-sum

Heymsfield, Former Staff Director of the House Committee on Transportation and Infrastructure former staff director, 11

[David, 2-22-11, National Journal, “Let the Games Begin,” <http://transportation.nationaljournal.com/2011/02/transforming-the-highway-trust.php>, accessed 7-4-12]

Currently the Trust Fund covers most federal programs for highways, transit, motor carrier safety, and highway safety. The budget proposes adding a number of programs, most significantly Amtrak, high-speed rail, and an infrastructure fund. The proposal does not appear to contemplate anything approaching unlimited discretion for the Administration to allocate the fund’s revenues to different modes. Rather, the proposal appears to contemplate continuation of the current Trust Fund structure in which spending from the fund must be within the context of a specific program established by the fund such as the National Highway System program or the Urbanized Area Formula program for transit. Most of these programs are limited to one mode, and use formulas to determine how much of the funding goes to each State. Another feature of the current system is that the States are given some discretion to “flex” their formula funding from one program to another (including flexing some funds between highway and transit programs).

In the existing structure there are only few programs in which the Administration has discretion to decide which mode will be funded. The budget proposes adding one new program in which there will be discretion to choose between modes, but it is only a small portion of the overall trust fund programs. Specifically, the Administration budget proposal contemplates giving the Administration discretion to decide which modes will be funded in a new Infrastructure Fund program. This program would be authorized at about $5 Billion a year in an overall program of more than $60 Billion.

It is not clear whether the Administration will also propose that the States be given any discretion to “flex” rail funding to highways or transit, or to flex highway or transit funds to rail.

Another major unknown is whether adding rail to the Trust Fund is likely to change the funding which rail, highway and transit would have received if the current system had been continued. Under the current system, overall funding for highways and transit is set at a level that falls within the revenues the Trust Fund will receive from the user fees supporting the fund. A number of factors go into the allocation of funds between highways and transit, including giving transit a “fair share” of total revenues, and having highways and transit grow at the same rate (or in today’s context, being reduced at the same rate). Under the existing system, rail is funded as part of a general transportation appropriation bill, based on general budget policies and the funding available for all transportation programs in the bill. Funding for rail is not tied to any particular revenue stream, or by the general relationship to funding for highways and transit.

If rail is moved to the Trust Fund, its funding will be determined by the available revenues and decisions on how they should be allocated between highways, transit and rail. The effects of this change seem unpredictable until we know the level and composition of the fund’s revenues. Until recently the user fees supporting the fund have been adequate to cover growing highway and transit programs. This is no longer the case. The existing fees will not even cover existing programs, much less a new rail program. The Administration is opposed to increasing the current user fees. If the new revenues are not user fees and cannot be tied to any mode, we can expect major disputes on how the new revenues should be divided. It will be a zero sum game in which a dollar going to one mode will not be available for the other two. It’s anybody’s guess what the end result will be, and how it will compare to what would have occurred if rail was not moved to the Trust Fund.

#### Transportation investments take money away from other sectors

Wachs, Institute of Transportation Studies director, 11

(Martin, Spring 2011, Professor Emeritus of Civil and Environmental Engineering and City and Regional Planning at the University of California, Berkeley and of the University of California Transportation Center, and former ACCESS: The magazine of UCTC, “Transportation, Jobs, and Economic Growth,” http://www.uctc.net/access/38/access38\_transportation\_growth.shtml, Accessed 6-29-12, CAS)

One way to judge a public investment is to determine whether or not it generates a rate of return to society that exceeds the return earned on other investments in the private or public sectors. Resources for government transportation investments are ultimately drawn from citizens and businesses through taxes or fees (like tolls), or borrowing. Had these dollars not been collected for transportation investments, they would have been put to other uses. Thus, the dollars used for these public investments constitute foregone opportunities to earn returns through private investments in businesses, or public investments in other programs ranging from schools to national parks. To be worthwhile undertakings, transportation investments should demonstrate that they raise the standard of living in the future as much, or more than, alternative private or public sector uses of the funds. To ensure the best use of taxpayer dollars, responsible officials should choose those projects yielding the highest returns. Most often that means transportation dollars should be spent on programs that most enhance long-term economic productivity.

#### Funding policies ensure modal winners and losers

Slack, Concordia University Geography professor emeritus, et al., 9

[Brian, Dr. Jean-Paul Rodrigue and Dr. Claude Comtois, “The Geography of Transport Systems,” 2nd edition, <http://people.hofstra.edu/geotrans/eng/ch3en/conc3en/ch3c1en.html>, accessed 7-2-12]

It is generally advocated that a form of modal equality (or modal neutrality) should be part of public policy where each mode would compete based upon its inherent characteristics. Since different transport modes are under different jurisdiction and funding mechanisms, modal equality is conceptually impossible as some modes will always be more advantageous than others. Modal competition is influenced by public policy where one mode could be advantaged over the others. This particularly takes place over government funding of infrastructure and regulation issues. For instance, in the United States the Federal Government would finance 80% of the costs of a highway project, leaving the state government to supply the remaining 20%. For public transit, this share is 50%, while for passenger rail the Federal Government will not provide any funding. Under such circumstances, public policy shapes modal preferences.

#### Resources are limited – funding trades off

Fabey, Travel Weekly, 10

[Michael, 3-15-10, “LaHood tells aviation industry: Don't fight high-speed rail funds,” Travel Weekly, <http://www.travelweekly.com/Travel-News/Government/LaHood-tells-aviation-industry--Don%E2%80%99t-fight-high-speed-rail-funds/>, accessed 7-4-12]

LaHood bristled at the insinuation that the government saw itself as a golden spigot of public funding for high-speed rail. "The idea that it will be all subsidized by the government is nonsense," he said. "There's not enough money in Washington." But that's partly the point, aviation officials said. There's precious little public funding available, and what there is should be targeted for important aviation programs like NextGen air traffic control and airport operations. "I'm not against high-speed rail," said FAA conference panelist James May, president and CEO of the Air Transport Association. "I just wish we could get more funding."

[Note – Ray LaHood = Secretary of Transportation]

### Sectors Trade-Off - Competition

#### Transportation investment takes jobs away from other sectors

Wachs, Institute of Transportation Studies director, 11

(Martin, Spring 2011, Professor Emeritus of Civil and Environmental Engineering and City and Regional Planning at the University of California, Berkeley and of the University of California Transportation Center, and former ACCESS: The magazine of UCTC, “Transportation, Jobs, and Economic Growth,” http://www.uctc.net/access/38/access38\_transportation\_growth.shtml, Accessed 6-29-12, CAS)

By building an effective transportation network, government transportation spending draws jobs to those industries that benefit from the investment. At the same time, this shift of resources moves jobs away from activities that would have been financed in the absence of the transportation investment. So while transportation investment can "create jobs," it can also destroy them. The overall effect is positive only when it creates more and better jobs, or more and better economic activity, than it eliminates.

#### Transportation investment shifts jobs from other sectors

Wachs, Institute of Transportation Studies director, 11

(Martin, Spring 2011, Professor Emeritus of Civil and Environmental Engineering and City and Regional Planning at the University of California, Berkeley and of the University of California Transportation Center, and former ACCESS: The magazine of UCTC, “Transportation, Jobs, and Economic Growth,” http://www.uctc.net/access/38/access38\_transportation\_growth.shtml, Accessed 6-29-12, CAS)

Determining whether a project's effects are going to be positive or negative can be difficult. A transportation investment might shift jobs, not just across industries and sectors, but also across counties and states. Even a transportation investment that destroys more jobs than it creates can look good, especially in the short term, from the perspective of the winning state or city. Gains and losses might be unevenly distributed, temporally as well as spatially. For example, building an ill-advised rail line might give a local economy a short-term boost in employment, only to saddle taxpayers with large operating deficits in the future.

#### Modal shift ensures the link

Slack, Concordia University Geography professor emeritus, et al., 9

[Brian, Dr. Jean-Paul Rodrigue and Dr. Claude Comtois, “The Geography of Transport Systems,” 2nd edition, <http://people.hofstra.edu/geotrans/eng/ch3en/conc3en/ch3c1en.html>, accessed 7-2-12]

The technological evolution in the transport industry aims at adapting the transport infrastructures to growing needs and requirements. When a transport mode becomes more advantageous than another over the same route or market, a modal shift is likely to take place. A modal shift involves the growth in the demand of a transport mode at the expense of another, although a modal shift can involve an absolute growth in both of the concerned modes. The comparative advantages behind a modal shift can be in terms of costs, convenience, speed or reliability. For passengers, this involved a transition in modal preferences as incomes went up, such as from collective to individual modes of transportation. For freight, this has implied a shift to faster and more flexible modes when possible and cost effective, namely trucking and air freight.

There are important geographical variations in modal competition. The availability of transport infrastructures and networks varies enormously. Some regions possess many different modes that in combination provide a range of transport services that ensure an efficient commercial environment. Thus, in contrast to the situation in the EU, rail transport occupies a more important market share in North America. In many parts of the world, however, there are only limited services, and some important modes may be absent altogether. This limits the choices for people and shippers, and acts to limit accessibility. People and freight are forced to use the only available modes that may not be the most economic for the nature of the demand. Goods may not be able to find a market, and people’s mobility may be impaired.

For these reasons, transport provision is seen as a major factor in economic development. Areas with limited modal choices tend to be among the least developed. The developed world, on the other hand possesses a wide range of modes that can provide services to meet the needs of society and the economy. Since 2000 the price of fuel has increased significantly as well as its volatility. All modes are affected, from the individual car owner to the corporation operating a fleet of hundreds of aircraft or ships. The higher costs are being passed on to the customer, either directly, as is the case of shipping where freight rates are climbing, or indirectly as is the case of airlines, where passengers are being charged additional fuel surcharges. These cost increases are likely to have significant impacts on mobility and trade, as well as on the modal split:

* Higher transport costs increase the friction of distance and constrain mobility. As a major consumer of petroleum the transport industry has to increase rates. Across the board increases causes people to rethink their patterns of movement and companies to adjust their supply and distribution chains. One of the expected effects of these cost increases is a decline in freight shipments and passenger carriers, such as airlines are anticipating a reduction in trips. Even school districts are anticipating reducing the number of busses and making children walk further to school.
* Because the impact of higher fuel costs hits the modes differentially, a modal shift is anticipated. Road and air transport are more fuel intensive than the other modes, and so fuel price increases are likely to impact upon them more severely than other modes. This could lead to a shift towards water and rail transport in particular.
* A further impact of fuel price increases is greater fuel economy across the modes. One of the best ways for all modes to reduce consumption is to lower speeds. A future of high energy prices is likely to have a major impact on just-in-time deliveries, and lead to a restructuring of supply chains.

### AT – Turn – We Boost Economy

#### No economic benefit – boosts tradeoff with declines elsewhere

Wachs, Institute of Transportation Studies director, 11

(Martin, Spring 2011, Professor Emeritus of Civil and Environmental Engineering and City and Regional Planning at the University of California, Berkeley and of the University of California Transportation Center, and former ACCESS: The magazine of UCTC, “Transportation, Jobs, and Economic Growth,” http://www.uctc.net/access/38/access38\_transportation\_growth.shtml, Accessed 6-29-12, CAS)

From a national perspective, and over time, gains that are immediate and obvious can be—and often are—outweighed by diffuse losses elsewhere. Suppose federal money was used to build a new highway link between a port and freight rail hub. The new link might cut delivery time within the region. The prospect of improved inventory management, increased sales, and other sources of profit would draw cargo to that port, increase port jobs, expand employment related to regional highway goods movement, and increase business at the rail hub. At the same time, it would likely reduce traffic to competing ports in other regions and create exactly the same chain reaction—in reverse—in those other areas. Employment would be lost as business is attracted to the competing port. The economy as a whole would be better off only if the increased productivity in the target area exceeded the cost of the highway investment and the loss of business in competing regions.

#### Localized benefits don’t outweigh larger tradeoffs

Wachs, Institute of Transportation Studies director, 11

(Martin, Spring 2011, Professor Emeritus of Civil and Environmental Engineering and City and Regional Planning at the University of California, Berkeley and of the University of California Transportation Center, and former ACCESS: The magazine of UCTC, “Transportation, Jobs, and Economic Growth,” http://www.uctc.net/access/38/access38\_transportation\_growth.shtml, Accessed 6-29-12, CAS)

Not all transportation investments meet these criteria. In the example above, suppose the highway link was built not at the high-productivity port, but instead, because of political considerations, in a region that has a less-busy port with little congestion. While more people in the less-productive region are employed in the construction of the facility, people in the more-productive region are likely to lose jobs, and the overall effect is likely to be negative. That is precisely why a "bridge to nowhere" in one particular state is a poor national investment even though it may benefit construction workers and others where it is built. In Los Angeles, the Alameda Corridor freight rail project greatly improved connectivity between the ports and the ground freight shipment system, but some of its benefits must be offset by calculating the growth that it redirected away from other ports such as Seattle or Oakland, given that shipping is a highly competitive economic sector.

# Airline Trade-Off DA

## Airline – 1NC Shell

#### Uniqueness – Airline industry rising now

Centre for Aviation, 12

(1-3-12, CAPA Centre for Aviation, “2012 marks beginning of next chapter in US airline industry,”

<http://www.centreforaviation.com/analysis/2012-marks-beginning-of-next-chapter-in-us-airline-industry-65485>, Accessed 7-3-12, THW)

While downturn is rife in the airline industry, the US industry will do relatively well, with IATA expecting the US industry to post USD2 billion in earnings in 2011 and USD2.9 billion in 2012 as US carriers limit capacity growth, keeping load factors high. Within the US there was a higher than expected consumer retailing at the end of the year, and while unemployment is still high it has shown a steady decrease since the last half of 2011. There are an increasing number of travel surveys concluding leisure travel will rise this year. Despite last summer’s angst, when fears of a double dip recession were high, the economy picked up nicely in 2011 growing faster than expected each quarter, with the fastest growth expected in the fourth quarter. Unemployment applications have been halved from the 650,000 in March 2009 although admittedly still too high to create a robust turnaround. Small businesses are hiring and consumer inventories at retailers are rising, up 8.7% in October year-on-year. Housing starts have also risen, up 9% in November compared to October. Trans- and intercontinental bookings are already up for Asia, Australia and Europe, according to a travel agent survey which indicated clients plan to spend the same or more for travel in 2012. The survey also supported suppositions that the advanced booking window will stretch as travellers try to squeeze every dollar out of their trips. Leisure travellers are already at eight weeks or more but business travel windows are expected to rise as well. United has already reported a 3.7% increase in advanced domestic bookings between mid-December and February. Fares were up 22.4% domestically in 2Q2011 compared to 2009, according to the Bureau of Transportation Statistics (BTS). While this is good news, it comes as inflation-adjusted fares are still 15.8% lower than in 2Q1995. Expect fares to continue their upward trajectory and more fare increase attempts to stick this year. We have passed the time when airlines will be consistent money losers, as evidenced by the fact that they were profitable in 2011 despite higher fuel prices than in 2008, when losses were common. It is difficult to visualise a circumstance when that would change failing another travel-related terrorist attack.

#### B. Link

[Insert Link to Plan]

#### C. Impact – Hegemony

#### 1. Continued investment in airport infrastructure is key to air power projection

**DRI•WEFA, Global Insight Company, 2**

(DRI•WEFA is a Global Insight Company, July 2002, “The National Economic Impact of Civil Aviation,” <http://www.aia-aerospace.org/stats/resources/DRI-WEFA_EconomicImpactStudy.pdf>, page 4, Accessed 7/5/12, THW)

On November 27, 2001, just 11 weeks after the terrorist attacks, John Marburger, Director of the White House Office of Science and Technology Policy, reiterated the continued need for investment in the nation’s airports and airways in remarks to the Commission on the Future of the U.S. Aerospace Industry: “We need to develop a 21st Century global air transportation system that provides safe, secure, efficient and affordable transportation of people, goods, and information in peacetime and wartime—enabling people and goods to move freely anywhere, anytime, on time. We need a system that: - Enhances national security by strengthening homeland defense while enabling the military to project power anywhere in the world at any time; - Increases U.S. economic competitiveness by building a more efficient, higher capacity air transportation system; and - Improves the quality of life of all Americans by enabling them to do *what* they want to do *when and where* they want to do it.?3

#### 2. Air power solves conflict – contains rogue nations

McKenzie, flight lieutenant, 12

(Sandy, Spring 2012, Royal Air Force Centre for Air Power Studies, “The Renaissance of Air Power,” <http://www.airpowerstudies.co.uk/APR%20Vol%2015%20No%201.pdf>, p. 94, accessed 7-3-12, THW)

Renaissance of Air Power As outlined above, the ‘New World Disorder’ that unfolded in the aftermath of the Cold War has provided numerous examples in which the utility of air power is evident across the spectrum of conflict. However, it is in the future that air power is likely to prosper most as postmodern governments shy away from expensive, inconclusive and arguably counterproductive counter insurgency campaigns. Air power will never succeed in delivering policy ends in isolation, but given the necessary preconditions, as illuminated in Libya, and hard headed objectives, it will offer politicians the opportunity to seize ‘relative advantage’ in crises that are too important to ignore, but too costly to fully resource. Change will be necessary in order that a true renaissance can flourish. Indeed ‘algorithmic warfare’ and data exploitation will become far more challenging than, for example, operating remotely piloted vehicles in high threat environments. Nonetheless, air power will remain the primary means of operating at range, in support of indigenous forces, interdicting a belligerent’s military capability, or containing rogue states. As events in Libya have proven, the renaissance may just be beginning. Recent analysis has concluded that, in Libya, ‘foreign air power comprised the rebels’ asymmetric advantage, without which their uprising would almost certainly have been quelled by Gaddafi’s forces. For proponents of air power, the outcome illustrated its judicious application, showing the way for foreign intervention in future local conflicts in spite of the general fatigue with the wars in Iraq and Afghanistan.’ 24 Indeed, the current Chief of the Air Staff appears to have been particularly prescient when arguing in early 2010 that: ‘Unfortunately, it’s only too easy for a foreign contingent to be portrayed as an alien and occupying force; it’s much better for the majority of ‘boots on the ground’ to be indigenous, supported and assisted by appropriate and highly trained specialists and Special Operations Forces with access to the higher-tech capabilities – including air and space power – that are difficult for local security forces to acquire and operate.’ 25 Ultimately, air power will never remove the requirement for complimentary land and maritime components; however to suggest it is in decline fails to grasp the new dawn of strategic calculation that confronts us. Alexander de Seversky famously argued that ‘air power speaks a strategic language’. 2 6 He could have had no idea how correct he would be.

## Uniqueness

### Airline Industry Strong Now

#### U.S. airline industry improving now

Centre for Aviation, 12

(1-3-12, CAPA Centre for Aviation, “2012 marks beginning of next chapter in US airline industry,”

<http://www.centreforaviation.com/analysis/2012-marks-beginning-of-next-chapter-in-us-airline-industry-65485>, Accessed 7-3-12, THW)

While downturn is rife in the airline industry, the US industry will do relatively well, with IATA expecting the US industry to post USD2 billion in earnings in 2011 and USD2.9 billion in 2012 as US carriers limit capacity growth, keeping load factors high. Within the US there was a higher than expected consumer retailing at the end of the year, and while unemployment is still high it has shown a steady decrease since the last half of 2011. There are an increasing number of travel surveys concluding leisure travel will rise this year. Despite last summer’s angst, when fears of a double dip recession were high, the economy picked up nicely in 2011 growing faster than expected each quarter, with the fastest growth expected in the fourth quarter. Unemployment applications have been halved from the 650,000 in March 2009 although admittedly still too high to create a robust turnaround. Small businesses are hiring and consumer inventories at retailers are rising, up 8.7% in October year-on-year. Housing starts have also risen, up 9% in November compared to October. Trans- and intercontinental bookings are already up for Asia, Australia and Europe, according to a travel agent survey which indicated clients plan to spend the same or more for travel in 2012. The survey also supported suppositions that the advanced booking window will stretch as travellers try to squeeze every dollar out of their trips. Leisure travellers are already at eight weeks or more but business travel windows are expected to rise as well. United has already reported a 3.7% increase in advanced domestic bookings between mid-December and February. Fares were up 22.4% domestically in 2Q2011 compared to 2009, according to the Bureau of Transportation Statistics (BTS). While this is good news, it comes as inflation-adjusted fares are still 15.8% lower than in 2Q1995. Expect fares to continue their upward trajectory and more fare increase attempts to stick this year. We have passed the time when airlines will be consistent money losers, as evidenced by the fact that they were profitable in 2011 despite higher fuel prices than in 2008, when losses were common. It is difficult to visualise a circumstance when that would change failing another travel-related terrorist attack.

#### Airlines are close to a record high and growing – summer forecasts prove

Marketwatch, 12

(5-11-12, Marketwatch, “U.S. Airlines Set for a Busy Summer Season

The Paragon Report Provides Stock Research on US Airways and JetBlue Airways,” <http://www.marketwatch.com/story/us-airlines-set-for-a-busy-summer-season-2012-05-11>, Accessed 7-3-12, THW)

NEW YORK, NY, May 11, 2012 (MARKETWIRE via COMTEX) -- Things may be turning around for airline stocks as they have posted respectable profits in what is historically their slowest quarter of the year. Collectively the top seven U.S. airlines have posted a first quarter operating profit of $247 million compared with a moderate loss a year ago according to data collected by the Deutsche Bank. The Paragon Report examines investing opportunities in the Airlines Industry and provides equity research on US Airways Group, Inc. LCC -2.51% and JetBlue Airways Corporation JBLU +1.29%. Access to full reports can be found at: [www.ParagonReport.com/LCC](http://www.ParagonReport.com/LCC) [www.ParagonReport.com/JBLU](http://www.ParagonReport.com/JBLU) Airlines for America's (A4A) annual summer forecast predicts that U.S. airlines will carry 206.2 million passengers in the June-August peak flying season, just 5 percent below the record of 217.6 million. A4A expects a record number of passengers to fly internationally this summer. Total passengers on international flights are forecasted to total 26.8 million, beating last summer's record of 26.3 million according to the group.

#### Airline industry growing now – assumes uncertainties with oil and the economy

Karp, Chicago Tribune, 3-9-12

(Gregory, 3-9-12, Chicago Tribune, “FAA: Profitable times likely ahead for airlines Increasing demand worldwide spurs optimism

airfares expected to rise relatively slowly,” <http://articles.chicagotribune.com/2012-03-09/business/ct-biz-0309-notebook-airlines-20120309_1_american-airlines-parent-united-continental-holdings-iam>, accessed 7-3-12, THW)

The airline industry, which traditionally has run in boom-and-bust cycles, has a good chance to be profitable during the next 20 years as demand for air travel grows worldwide. And the good news for passengers is that airfares will rise relatively slowly over that time.

That prediction comes from the Federal Aviation Administration in a report released Thursday.

"Over the long term, we see a competitive and profitable industry characterized by increasing demand for air travel and airfares growing more slowly than inflation," said the report, called the "FAA Aerospace Forecast Fiscal Years 2012-2032." "Going into the next decade, there is cautious optimism that the industry has been transformed from that of a boom-to-bust cycle to one of sustainable profits."

The report predicts more demand for air travel despite rising oil prices and economic uncertainty in the U.S. and Europe. It forecasts that the industry will grow from 731 million passengers in 2011 to 1.2 billion in 2032.

"This year, more people will be flying more miles, and we expect that to continue in future years," FAA Acting Administrator Michael Huerta said in a statement.

#### The industry is recovering – increased traffic and government predictions

Levin, USA Today, 11

(Alan, 2-5-11, USA Today, “FAA predicts steady growth for airline industry”, <http://travel.usatoday.com/flights/story/2011/02/FAA-predicts-steady-growth-for-airline-industry/43752062/1>, Accessed 7-3-12, THW)

WASHINGTON – The embattled airline industry will see solid long-term growth over the next 20 years with yearly passenger totals climbing from 713 million to nearly 1.3 billion, the government predicted today. That growth will add huge new pressures on the aviation system, requiring technological improvements to ensure that it can handle the additional traffic, said Transportation Secretary Ray LaHood. "We need to invest in aviation today to make sure America's economy remains competitive," LaHood said. The annual Federal Aviation Administration aviation forecast projects small increases in airline flights and passengers this year compared to 2010. Overall, the amount of flights will decrease slightly this year due to continuing decreases in private aircraft flights, the FAA says. After a decade in which the airlines lost a collective $60 billion, the FAA says the industry turned a profit last year of $9.5 billion as the U.S. economy rebounded from recession and airfares rose. Domestic airline passengers are expected to increase by 3% this year over last and then climb by an average of 2.5% annually for the remainder of the next 20 years. International traffic is forecast to surge this year by 7.8% and continue growing by 4.3%, the FAA says.

### AT – Oil Prices Rising

#### Fuel prices are dropping and don’t impact the airline industry

Reuters 6-8-12

(6-8-12, Reuters, “Struggling airlines get some relief with cheaper oil,” <http://articles.economictimes.indiatimes.com/2012-06-08/news/32124147_1_iata-airline-traffic-airline-industry>, Accessed 7/3/12, THW)

BEIJING: Fresh fears over the global economy could unravel the benefit of cheaper oil prices and keep a lid on financial forecasts for the airline industry when its chiefs gather in China this weekend for their annual summit.

An eight per cent drop in oil prices this year has delivered a quick fix to an industry severely damaged by record fuel costs - but the main reasons for the drop, Europe's debt crisis and a slowdown in China's economy, cast a shadow over its recovery.

"The reduction in fuel prices is a great thing for the airline industry but they are coming down because of concerns over world economic activity," said Tony Tyler, director general of the International Air Transport Association (IATA).

## Links

### High Speed Rail Trades Off With Airlines

#### High speed rail directly trades off and competes with airlines

Bardsley, The National, Foreign Correspondent, 10

(Daniel, 3-20-10, The National, “Full Throttle on High Speed Rail,” <http://www.thenational.ae/business/full-throttle-on-high-speed-rail>, accessed 7-4-12, JC)

**While high-speed trains may be popular with passengers**, **they can cause turbulence to the airline industry**. The rolling stock may not be as fast as an aircraft, but **as the trains run directly into city centres they can be more attractive than flying**, even for business travellers. **No wonder then that airlines have cut prices to stay competitive**. **China Southern** Airlines **used to charge** a reported **700 yuan** to fly between Guangzhou and Changsha, which lies on the line to Wuhan. **This month, passengers could buy tickets** online **from** the carrier for as little as **170 yuan**. **In Europe, airlines have dropped some routes between major cities altogether as a result of competition from high-speed railways**. Mr Sangiambut believes **China's airlines will be put further on the back foot by new train routes.** **Flights of less than two hours**, he says, **would be "very much impacted**" if high-speed trains start operating the same route. "**They will come under pressure** when these high-speed networks become more fully operational," he says. "I don't think they will be closed entirely, but frequency could be reduced." The price of a Beijing-Shanghai high-speed train ticket has not been announced yet, but Mr Sangiambut says the ministry of **railways will ensure it is "rather competitive" with flying**. As a result, he thinks the Beijing-to-Shanghai **air route will suffer** when the high-speed rail line opens and cuts the rail trip from 10 hours to four hours. "There will be some impact for sure," he says.

#### Trains trade off – Chinese airline industry proves

Perrett, Aviation Week**, 11**

(Bradley, 4-1-11, Aviation Week, “Fast Trains Drive Chinese Airlines Off Another Route”, Lexis Nexis, accessed 7-4-12, JC)

Fast trains have claimed another aviation victim in China, with China Southern and Henan Airlines giving up the Wuhan-Nanjing route**.** Ominously for aviation**, the carriers decided they were unable to compete over that stage length against trains that by Chinese standards are only moderately fast,** with maximum speeds of 250 kph (160 mph). The two cities are 450 km (280 mi.) apart, and the trains take three hours for the trip. More decisive than their speed probably was their fares—just 180 yuan ($27) each way**. The two airlines had been struggling to survive against the** introductory **fast rail service** ofthree trains a day that began in 2009**.** The prospect of increased frequencies in the third quarter makes the route untenable, and **it is better to give up immediately,** the carriers tell Chinese media**. As** therailways ministry commissions **the world’s largest high-speed rail system, the airline industry is watching for** signs from early routes of how **severe** the **damage** will be**.** A year ago, China Southern was driven off the 440 km route between Zhengzhou and Xi’an by 350 kph trains. The experience with the 250 kph trains between Wuhan and Nanjing suggests that **the fastest rail services can eliminate all airline competition** on a Chinese route of more than 450 km. China Southern lost half of its business on the 840 km route between Wuhan and Guangzhou last year, when 350 kph trains began running between the two cities. Thousands of kilometers of new lines will be opened this year. Yet the Civil Aviation Administration of China is predicting 13% annual traffic growth for the airlines in the coming five years, barely **less than the rates of about 15% usually seen last decade.** Henan Airlines is an Embraer 190 operator affiliated with Air China. Rapidly developing Wuhan, with a population of 10 million, including surrounding districts, is a hub of the fast-rail system. Nanjing, with more than 6 million people, is another hub, in the developed eastern region of China.

#### Rail out competes—fuel prices, travel times, and reliability.

**Jorritsma, Aerlines Magazine, 9**

(Peter, 2009, Aerlines Magazine, “Substitution Opportunities of High Speed Train for Air Transport,” <http://www.aerlines.nl/issue_43/43_Jorritsma_AiRail_Substitution.pdf>, p. 1, accessed 7-4-12, JC)

Introduction **Competition between** **high-speed trains** (HST) **and airplanes is becoming a hot issue** again nowadays. High **fuel prices** and the introduction of a so-called ecological surcharge in the Netherlands on airplane tickets **have put pressure on airline companies**, and have created new opportunities for high-speed rail transport. Eurostar recently announced it experienced a 20 per cent growth in passengers over the last six months, compared to the same period in 2007. This has been due to improved travel times between Brussels and London and between Paris and London. Eurostar did not mention whether passengers substituted from the airplane or car, nor is it clear if the growth can be attributed to a generation effect (i.e. new journeys). Airline companies have also taken a slice of the pie of high speed transport. KLM /Air France participate together with Dutch Railways in the High Speed Alliance (HSA) which operates the Thalys trains on the Amsterdam-Paris route. Passengers will be transferred from the airplane to the trains at the airline hub with their ticket booked by the airline company. Factors Influencing Substitution **Many factors influence the market shares between the airplane and high-speed trains**. According to the literature, travel time is the most important one. Barron (2007) reports market shares ranging from 10 percent to 97 percent for HST compared to the airplane**. The HST has a clear advantage over the airplane on city pairs with travel times between two and three hours**. **The train can achieve market shares of between 50 and 90 percent**. Good examples are city pairs such as Paris-Lyon, Madrid-Seville and Rome-Bologna. The Thalys high-speed train on the Amsterdam-Paris (4 hours) route, which is not yet in full operation, already has a market share of approximately 45 percent compared to the airplane. Other factors that contribute to the relative position of rail to air are ticket prices, frequency of the service, the integration of networks, airline alliances, accessibility of railway stations and airport terminals, reliability and punctuality of the services and government policy. **In general, the ticket price for high-speed rail travel is lower than for air travel, and this difference is reflected in the market shar**e, which is in favor of the HST. However, the rise of low cost air carriers has put pressure on overall ticket prices in the air market. On certain city pairs (i.e. LondonEdinburgh), low-cost carriers even offer tickets below the price of a train ticket. Unfortunately, hardly any research is available about the impact of low-cost carriers on the substitution rate. Eisenkopf (2006) estimates a substitution rate from rail to air ranging from 5 per cent (Cologne- Hamburg) to 13 per cent (Cologne-Munich). Travel time and travel costs to and from the airport terminal to the city center or downtown area determine the accessibility of the airport. On the route Madrid-Barcelona, the average travel time and travel costs from the city to the airport are relatively low. That is one of the reasons for the high market share of the airplane on that route. On the other hand, the highspeed train has a significant market share on the Paris-London route, despite its high ticket price. Poor accessibility of both airports by train and road is probably a factor that has a certain influence (Steer Davies Gleave, 2006). **The operators of high-speed rail services find reliability and punctuality important factors that contribute to higher market shares**. For example, the punctuality of the Eurostar (the share of trains with, at the most, a 15 minutes deviation from the timetable) has increased from 79 per cent since it started operations to 89 per cent today. Eurostar claims that punctuality is as important as improving travel time. **Improved punctuality makes it also attractive for business travelers to plan their return journey over longer distances on the same day.**

#### High speed rail ruins the airline industry – steals their market

**Jaffe, The Atlantic Cities Writer, 12**

(Eric Jaffe, Writer for The Atlantic Cities and the author of The King's Best Highway: The Lost History of the Boston Post Road, the Route That Made America, 1/13/12, The Atlantic Cities, “What the Eurostar’s Success Means for California HSR,” <http://m.theatlanticcities.com/commute/2012/01/what-eurostars-success-means-california-hsr/938/>, Accessed 7/2/12, THW)

The discussion of high-speed rail in the United States often veers off track, if you will, by the presence of strong auto interests. While roads and rails certainly compete for federal funding, it's planes and trains that compete most for travelers in mid-range, city-to-city corridors. American high-speed rail may not win many contests with the highway lobby, but a new study of intermodal competition in Europe shows that fast trains can more than handle their own against air travel when given the chance. In a study in press at the Journal of Urban Economics, Dutch researchers Christiaan Behrens and Eric Pels analyze the passenger market between London and Paris from 2003 through 2009. The primary competitors in this corridor are conventional air carriers like Air France and British Airways, low-cost carriers like easyJet, and the Eurostar high-speed rail service. Over the course of the study — which looked at roughly 9,500 business and 18,000 leisure trips — the Eurostar has been far and away the dominant travel choice: Air France and British Airways reduced their service from Heathrow Airport dramatically during the study window. Two major air travel choices — British Airways from London Gatwick and British Midland from Heathrow — left the market entirely. Only the low-cost easyJet has been able to compete, primarily with leisure travelers. Meanwhile the Eurostar has increased its service to match its popularity, which only grew after the train moved from the Waterloo International station to the more convenient St. Pancras International in central London in late 2007. Behrens and Pels found that frequency, travel time, and distance to the point of departure were major determinants of travel behavior in the corridor, in addition of course to fares. The total travel time on Eurostar (which includes getting to the station) is relatively long compared to flights: roughly 3 hours 20 minutes in 2003, dropping to 2 hours 50 minutes after the move to St. Pancras, against 1.5 or 2 hours for airlines. But the train's on-time arrival was 95 percent, much higher than that of its competitors, and by 2009 its frequency had grown to twice that of major airlines, with 119 weekly trips. First-class fare is also cheaper on the Eurostar, and since 2007 its coach fare has been cheaper than fares on the three main air alternatives, according to the report. The researchers used their models of the Paris-London corridor to consider the potential success of high-speed rail from San Francisco to Los Angeles. Behrens and Pels made several notable assumptions — similar passenger behavior in the United States as in Europe, for instance, and a rail fare that costs only 80 percent of air travel — still their findings will come as some encouragement to American high-speed rail supporters. At a travel time of roughly 3 hours, which is about what California's high-speed rail authority expects, the train would capture about 30 percent of business travelers and 40 percent of the leisure market, according to Behrens and Pels. In the unlikely chance the fast train can achieve a travel time of 2 hours 25 minutes, it could win about half the market share of leisure travelers:

#### Train spending trades off with demand for airline travel

**De Rus, University of Las Palmas Professor of Economics, 8**

(Ginés De Rus, University of Las Palmas Spain, JOINT TRANSPORT RESEARCH CENTRE Discussion Paper No. 2008-16, Published October 2008, revised May 2012, “The Economic Effects of High Speed Rail Investment,” <http://www.internationaltransportforum.org/jtrc/discussionpapers/dp200816.pdf>, Pages 16-17, Accessed 7/2/12, THW)

The construction of a new HSR line of a length within the range 400-600 km has a significant impact on air transport. Modal split changes dramatically in the affected corridor as the generalized cost of the railway is lower than the generalized cost of air transport. As the recently launched AVE Madrid-Barcelona illustrates, the introduction of HSR in a corridor of 600 km long gives railways a role unforeseen with the average rail speeds of recent past. The airlines carried 5 million passengers per year in the route Madrid-Barcelona and three months after the HSR services were introduced they are losing traffic at a rate that amounts to 1.2 million passenger-trips per year (see Figure 1 and Table 1). What about other HSR lines? The intermodal effect of HSR is stronger in lines with a longer period in operation. The effect of the introduction of HSR in medium distance corridors where conventional rail, car and air were the previous alternatives is quite significant as Table 2 and Figure 2 illustrate. The HSR market share is correlated with rail commercial speed and, with the exception of Madrid-Barcelona (recently launched), in those lines where the average speed of rail is around to 200 km the market share of the HSR is higher than 80 per cent. The high market share of railways in these medium distances has been an argument in favour of investing in the HSR technology. If passengers freely decide to shift overwhelmingly from air to rail it follows that they are better off with the change. The problem is that a passenger decides to move from air to rail because his generalized cost of travel is lower in the new alternative (certainly, this is not so for everybody as air transport maintains some traffic) and this is not a guarantee that society benefits with the change as it can easily be shown. The direct benefits in the corridor where the HSR line is built come mainly from the deviation of traffic from the existing modes of transport, railway included. These benefits are accounted for in Cx and v(r1 –r2 )Q0 in equation(2), where time savings (r1 –r2 )should be interpreted as the average of the highest benefit obtained by the first user after the change and zero, the value corresponding to the last user, who is indifferent between both alternatives. The intermodal effects measured in the primary market consist of the cost savings in the conventional mode and the product of the value of time, the average time savings and the number of passengers shifting from the conventional mode to the new transport alternative. The interesting point here is that these average values hide useful information regarding user behaviour and the understanding of intermodal competition. Time savings can be disaggregated in access and egress, waiting and in vehicle time. Each of these categories of time has a different value. Passengers usually give more value to savings coming from access, egress and waiting time than those coming from `in vehicle time´; therefore, when users shift from road transport to HSR they save substantial amount of `in vehicle time´ (3 hours in a HSR with a 600km length) but they invest access, waiting and egress time partially offsetting the `in vehicle time´ savings. Moreover, as the `in vehicle time´ generates less disutility than the other components, the final user benefits can even be negative. The opposite case occurs in the case of air transport, where time savings experienced from users shifting to HSR come from a reduction of access, waiting and egress time which hardly offset the substantial increase in vehicle time. Even with a negative balance in terms of time savings, the user benefit can be slightly positive when the different values of time are considered (we do not include the ticket price in this comparison). Looking at Table 3 it seems apparent that HSR is cheaper than air transport, at least if a non restricted tourist fare is taken as the reference. Though the comparison is not straightforward railway fares seem to be below the air alternative, the HSR average costs are quite above HSR prices; meanwhile airlines operate in competitive markets and have to cover total producer costs. These facts deserve a closer examination because direct benefits of deviated traffic from air transport are included through the term v(r1 –r2 )Q0 in equation (2), and the value in brackets could be very low where air transport provide a good service (let us remember that prices are transfers and do not count as social benefits). The conclusion is that the case for HSR investment can rarely be justified on the benefits provided by the deviation of traffic from air transport. It seems apparent than higher benefits could be harvested deviating traffic from road transport but this is more difficult in the range of distances considered. The benefits of deviating traffic from road and air exceed the direct benefits discussed above, as other indirect benefits could be obtained in the other transport modes when their traffic volumes diminish with the project. Let us examine the conditions required for obtaining additional benefits in the secondary markets.

#### High speed rail decreases airline dependence by 30% - multiple historic cases

**IREA 10**

(Institut de Recerca en Economia Aplicada, The Research Institute of Applied Economics, “High-Speed Rail: Lessons for Policy Makers from Experiences Abroad,” <http://www.ub.edu/irea/working_papers/2010/201003.pdf>, Pages 7-8, Accessed 7/2/12, THW)

As an HST service enters a given corridor as a new or upgraded transport mode, its performance can attract new passengers, as well as those that had previously been using air, road or conventional rail services. Thus, upgrading rail transportation is expected to affect the airline industry and road usage over medium distances. The European Commission (1996) provides data on changes in modal shares following the introduction of HST on the Paris- Lyon (France) and Madrid-Seville (Spain) lines. In the first of these (Paris-Lyon), between 1981 and 1984, the modal share of air traffic fell from 31 to 7%, and that of car and bus traffic fell from 29 to 21%, whereas rail traffic rose from 40 to 72%. In the case of the Madrid-Seville line, between 1991 and 1994 the modal share of air traffic fell from 40 to 13%, and that of car and bus from 44 to 36%, while train increased from 16 to 51%. Hence, as modal shares are subject to dramatic changes, this review highlights the ways in which the introduction of an HST line can alter the modal split between two cities.

#### High speed rail steals air traffic

**IREA 10**

(Institut de Recerca en Economia Aplicada, The Research Institute of Applied Economics, “High-Speed Rail: Lessons for Policy Makers from Experiences Abroad,” <http://www.ub.edu/irea/working_papers/2010/201003.pdf>, Pages 7-8, Accessed 7/2/12, THW)

The modal distribution of traffic has been affected by the introduction of HSR in all the cases studied, having the greatest impact on the airline industry in France and Spain. As Table 5 highlights, immediately following the inauguration of the HST service, the share held by air transport fell significantly in both countries. Similarly, road transportation has suffered from competition from HST, albeit to a lesser extent. Surprisingly, the impact on the modal shares of the Paris-Lyon and Madrid-Seville lines were very similar according to the European Commission (1996). Recent data on the traffic between Barcelona and Madrid, the main air corridor in the Spanish airline market (and indeed in the entire world market, with almost five million passengers per year in 2007), show that after a year of HST service a third of air traffic has switched to rail.

#### High speed rail has a travel time advantage over air travel

**Jiménez, Economics of Infrastructure Group, and Betancor, Associate Professor at Universidad de las Palamas de Gran Canaria, 11**

(Juan Luis Jiménez, Ph.D. in Economics, Ofelia Betancor, Economics of Infrastructure and Transport Group (EIT), PhD in Economics, Transport Market Competition, “High Speed Rail vs. Air Competition in Spain,” <http://www.aerlines.nl/wp-content/uploads/2011/01/49_Jimrnez_HRS_AIR_Spain.pdf>, Page 1, Accessed 7/2/12, THW)

Before the introduction of high-speed railways (HSR), aircraft and railways were considered as independent modes of transportation that could not compete given their different features (Ivaldi and Vibes, 2005). The empirical literature finds that the introduction of HSR has a significant effect on consumers and, therefore, on air carriers. This fact is more relevant in routes with a distance shorter than 800 kilometers or with a travel time by train of less than 3 hours (IATA, 2003). In addition to speed, it is the fact that most cities’ railway stations are located in downtown areas, which gives HSR the travel time advantage over aircraft (Givoni and Banister, 2007). There are some examples from around the world about the effects of HSR on the air sector. Paris-Lyon was one of the first routes where a high-speed rail operated and in which airlines reduced their participation almost 50 percent. In Spain, on the route Madrid-Seville (HSR entry in 1992), railway increased its share from 16% to 51% (Park and Ha, 2006). There is a considerable among of literature analyzing the influence of the market structure on competitive variables, mainly prices and frequencies for the case of the air transport sector.ii Results in all of these studies are similar: the level of concentration on the route or at the airport positively affects consumer prices. Another research branch is related to the rise of low-cost air carriers. Those studies point out how such air companies discipline competition, leading to price reductions after their entry or even making incumbent air carriers change their behavior into a low-cost carrier entry threat, as described in Goolsbee and Syverson (2008).iii

#### More high speed rail passengers lead to less airline passengers

**Jiménez, Economics of Infrastructure Group, and Betancor, Associate Professor at Universidad de las Palamas de Gran Canaria, 11**

(Juan Luis Jiménez, Ph.D. in Economics, Ofelia Betancor, Economics of Infrastructure and Transport Group (EIT), PhD in Economics, Transport Market Competition, “High Speed Rail vs. Air Competition in Spain,” <http://www.aerlines.nl/wp-content/uploads/2011/01/49_Jimrnez_HRS_AIR_Spain.pdf>, Page 2, Accessed 7/2/12, THW)

Table 1 shows some information on the main variables per route, distinguishing, in the case of routes with HSR, the period before and after the introduction of HSR services. The variables reported in this table are the focus of our econometric analysis as presented below. Of particular importance are the number of total passengers (air plus rail), the number of flights and the market share of air transport as compared to the railway mode. In such routes (Barcelona, Málaga and Zaragoza), air transport monthly operations and passengers carried have decreased after the introduction of HSR services. In turn, passengers transported by railway (monthly average) increased substantially. In fact, the trains’ market share more than tripled for the route Madrid-Barcelona, doubled for the route Madrid-Málaga, and almost monopolized the passengers’ volume in the case of Madrid-Zaragoza. Finally, it is worth noting Iberia’s behavior concerning the starting of HSR services. The change in its air transport market share is not so clear. In fact, except for Barcelona, it maintained or even increased its share. For routes without HSR services, as expected, the air transport mode is more relevant, especially for routes connecting Madrid with cities in the North of Spain. As we will see below, the Madrid-Barcelona route in particular is competitive, and one where HSR has clearly won the race with air carriers for the market.

#### High speed rail decrease air transport operations by one/sixth

**Jiménez, Economics of Infrastructure Group, and Betancor, Associate Professor at Universidad de las Palamas de Gran Canaria, 11**

(Juan Luis Jiménez, Ph.D. in Economics, Ofelia Betancor, Economics of Infrastructure and Transport Group (EIT), PhD in Economics, Transport Market Competition, “High Speed Rail vs. Air Competition in Spain,” <http://www.aerlines.nl/wp-content/uploads/2011/01/49_Jimrnez_HRS_AIR_Spain.pdf>, Page 2, Accessed 7/2/12, THW)

Using a Two-Stage Least Square estimator (2SLS-IV) with instrumental variables, we reach several conclusionsiv. Firstly, on the routes in which Iberia has a higher market share in the air transport market, the total number of operations decreases, as pointed in the works by Schipper et al. (2002), Carlsson (2004) or Bilotkach et al. (2010), too. Secondly, distance negatively affects the frequency of monthly flights. Thirdly, the parameter of the HSR dummy is negative and is statistically significant when explaining the total number of operations. On average, the number of air transport operations decreases by 17% in response to the introduction of HSR, though this result differs depending on the route and the airlines considered.

**High speed rail decrease airline passengers significantly**

**Jiménez, Economics of Infrastructure Group, and Betancor, Associate Professor at Universidad de las Palamas de Gran Canaria, 11**

(Juan Luis Jiménez, Ph.D. in Economics, Ofelia Betancor, Economics of Infrastructure and Transport Group (EIT), PhD in Economics, Transport Market Competition, “High Speed Rail vs. Air Competition in Spain,” <http://www.aerlines.nl/wp-content/uploads/2011/01/49_Jimrnez_HRS_AIR_Spain.pdf>, Page 3, Accessed 7/2/12, THW)

We now focus on how passengers (by routes and market shares by mode change) after the introduction of HSR. In this case, we explain the total passengers (train plus air) carried in route i at year t, the Air Transport Share in terms of passengers of the total transport market (air plus railways) and the Iberia´s Share in terms of passengers. The empirical strategy, description of variables and period of time considered was similar to that applied to get estimates for the effect on frequencies, but for the fact that variables were on a yearly basis. Our results show that the introduction of HSR in the Spanish markets has produced an important impact on demand. In fact, it has increased between 41 to 86 per cent, depending on the routes, however, we are not able to identify what part of it has been deviated from the road market and what part is purely new generated demand. On the other hand, the air transport total market share has also been significantly affected. After the introduction of HSR, the air transport share in terms of passengers is between 14 to 33 percentage points lower. Fi¬nally, Iberia’s share in the air markets also reduced with the introduction of HSR, and it is for the Madrid-Barcelona route that such a decrease is more important.

### High Speed Rail Trades-Off– China Proves

#### High speed rail trades off with aviation – China Proves

**Butterworth, Hayes Aviation Consultant, 12**

(Philip, February 2012, Aerospace America, “High-speed rail will impact airliner markets” <http://www.aerospaceamerica.org/Documents/Aerospace-America-PDFs-2012/February-2012/International-Beat-FEB2012-2.pdf>, pg.2, accessed 7-6-12, JC)

Some estimates are suggesting the im- pact could be more short term. Ac- cording to a study by the Centre for Asia Pacific Aviation on the implica-tions of HSR growth in aviation in China: “Some estimates put the loss in revenue for China’s aviation industry from reduced traffic and price pres- sure at up to CNY10 billion ($1.5 bil- lion) in 2012, or 3-4% of the total. Li Ji- axiang, director of the Civil Aviation Administration of China, stated some 50% of flights less than 500 km in length could become unprofitable as a result of competition from high-speed trains, and around 20% of flights of between 800 and 1,000 km could also run at a loss for the same reason. But sectors above 1,500 km are not likely to be threatened, he added....Guotai Junan Securities recently predicted that high-speed rail could capture be- tween 1.3% and 5.3% of domestic air- line passengers [per annum] by 2014.“First Capital separately forecast that airline revenues would decline by between 3% and 7.9% due to shrink- ing demand,” the study continues. “China Minzu Securities, while down- playing the impact of high-speed rail- ways on airlines, stated up to 9% of passengers could shift from air to rail transport by 2016.” However, the impact of new HSR services on the demand for single- aisle aircraft may be less than many in the aviation industry fear.

**China proves – airlines cannot compete with high speed rail**

**Fu, Hong Kong Polytechnic University, Business faculty, Zhang, University of British Columbia, School of Business, and Lei, Cranfield University, Department of Air Transport, 11**

(Xiaowen Fu, Anming Zhang, Zheng Lei, 12-16-11, Science Direct, “Will China’s airline industry survive the entry of high-speed rail?” <http://www.sciencedirect.com/science/article/pii/S073988591100062X>, accessed 7-4-12, JC)

In summary, **Chinese airlines have been unable to compete** with CRH on the short-/medium-haul routes **even with cost-based pricing**. **This poses a serious challenge to** Chinese **airlines** as their costs have been increasing. During 2005e2010 Chinese RMB appreciated by more than 20% against the US dollar, which significantly reduced Chinese carriers’ cost leadership in the international market as evidenced in Table 4. Such a currency appreciation has been a blessing overall, since Chinese airlines derive most of their revenue from domestic markets while finance majority of their fleets purchase with debt in US dollars. Goldman Sachs (2010a) estimated that for the “big three” carriers, namely Air China, China Eastern and China Southern, their RMB based sales account for 70e80% of their revenues, while non-RMB based debt account for 70e87% of their total debts. However, **if Chinese airlines have to rely more on international business due to increased competition in domestic market, appreciation** of RMB **will work against them.**

**Once high speed rail has been invested in, airlines won’t be able to compete**

**Fu, Hong Kong Polytechnic University, Business faculty, Zhang, University of British Columbia, School of Business, and Lei, Cranfield University, Department of Air Transport, 11**

(Xiaowen Fu, Anming Zhang, Zheng Lei, 12-16-11, Science Direct, “Will China’s airline industry survive the entry of high-speed rail?” <http://www.sciencedirect.com/science/article/pii/S073988591100062X>, accessed 7-4-12, JC)

It should be noted **that there is little room for airlines to lower prices further, as current fares are already close to cost.** The Cost per Available Seat Kilometer (CASK) of China Southern in the first half of 2010 is about 0.48 RMB, whereas the flight operation cost excluding depreciation, maintenance, airport and ATC costs per CASK is 0.26 RMB. Even with a load factor of 85%, for service over a distance of 1000 km this translates to a total cost of 565 RMB or marginal/operational cost of 306 RMB.15 However the HSR is barely a winner. Based on the estimation in the previous section, the operational cost, interests cost and depreciation per seat amounted to 200 RMB, 260 RMB and 300 RMB respectively. The current fare of 490 RMB only covers variable costs and a proportion of fixed costs. However, **once the HSR infrastructure has already been invested, market outcome will be determined largely by marginal costs**. Besides, **while it is relatively easy for airlines to re-deploy their fleets**, **rail operator faces great exit barrier and thus would continue to compete aggressively so long as price is larger than marginal cost**. **With current cost structure, airlines can barely compete** **on this route for point-to-point travelers.**

**High speed rail will out-compete airlines – China proves.**

Webb, Hong Kong and Shanghai Banking Corporation Limited, analyst, and Khetan, associate from Bangalore, 11

(Mark and Rajani, 5-11-11-, HSBC, “Chinese Airlines: High Speed Rail Risks Overplayed”, <http://www.research.hsbc.com/midas/Res/RDV?p=pdf&key=nwQKbLbAgP&n=297672.PDF>, p. 1, accessed 7-4-12, JC)

Airlines derailed? **As China’s** high speed rail **(HSR) network rolls out, airlines are under pressure to prevent passenger migration.** Some **HSR routes currently in operation have had airlines abort operations on them, cut capacity, or slash fares. The concerns over the airline industry’s future are intensifying** as the Beijing- Shanghai route approaches its inauguration in June this year, **followed by another three key routes to be opened in 2012. HSR risks overplayed HSR has cost and time advantages over airlines on short-haul journeys.** We argue that **journeys under 1000 kilometers will be dominated by HSR because the speed advantage of airlines over these distances disappears as airport access, check-in, check-out and travel time from the airport to city centre are taken into consideration.** However, not all the airline routes in this market are at risk as a large portion of such airline routes is in West China – a region with no HSR. Indeed, we estimate that the routes actually at risk in this category formed less than 2% of the total domestic capacity of the three PRC airlines in 2010. Over longer distances, however, we argue that HSR risks will be very limited for two reasons. First, HSR would be time disadvantaged over these distances. Second, the high proportion of business traffic (with low price-time elasticity) on the routes that matter most to airlines (in terms of capacity, revenue and profits) would mean low migration.

**High speed rail will wreck the airline industry**

**Fu, Hong Kong Polytechnic University, Business faculty, Zhang, University of British Columbia, School of Business, and Lei, Cranfield University, Department of Air Transport, 11**

(Xiaowen Fu, Anming Zhang, Zheng Lei, 12-16-11, Science Direct, “Will China’s airline industry survive the entry of high-speed rail?” <http://www.sciencedirect.com/science/article/pii/S073988591100062X>, accessed 7-4-12, JC)

3. Competitive effect of HSR on airlines **Sharp competition between HSR and airlines has been witnessed in markets around the world, particularly in short to medium routes** linking metropolitan cities. HSR was introduced to Spain in 1992 **with** the opening of **the** 472 km **Madrid**eSevilla **line**. **The rail share** of the whole air þ rail market **increased** **from 21**% in 1991 **to 82%** in 1993**.** In **the London**e**Paris** **route**, EuroStar has, since introduced in 1994, **captured about 80% of the point-to-point traffic** (Steer Davies Gleave, 2006**). The Taiwan High Speed Rail** (THSR) **started operation in January 2007**, linking Taipei and Kaohsiung along the west coast with a total distance of 335.5 km. **In less than three years, THSR has eliminated intra-Taiwan air travel services**. In South Korea, the opening of **HSR between Seoul and Busan in 2004 has significantly reduced air traffic** between the two cities. The International Transport Forum (2009) reported that **domestic air traffic in France declined by 7%** **between 2000 and 2007**, which was **mostly attributable to the increased availability of HSR** connections.

**HSR will price airlines out of the business**

**Fu, Hong Kong Polytechnic University, Business faculty, Zhang, University of British Columbia, School of Business, and Lei, Cranfield University, Department of Air Transport, 11**

(Xiaowen Fu, Anming Zhang, Zheng Lei, 12-16-11, Science Direct, “Will China’s airline industry survive the entry of high-speed rail?” <http://www.sciencedirect.com/science/article/pii/S073988591100062X>, accessed 7-4-12, JC)

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### High Speed Rail Trades-Off – Spain Proves

**High speed rail would be a disaster for the airlines industry – Spain proves**

**Webb, aviation reporter, 9**

(Dan, 4-21-9, Boarding Area, “Should Airlines Fear High Speed Rail?,” <http://boardingarea.com/blogs/thingsinthesky/2009/04/21/should-airlines-fear-high-speed-rail/>, accessed 7-4-12, JC)

I was reading [Marshall Jackson’s blog](http://boardingarea.com/blogs/mjontravel/2009/04/18/random-reflections-on-the-week/) this weekend and noticed he had mentioned that President **Obama has revealed** his initial **plans for high speed rail in this country. I asked myself if an expansion could hurt the airlines. Short answer: absolutely. One notable example is the Madrid – Barcelona route**, which has [historically been the world’s busiest](http://gospain.about.com/b/2007/12/28/madrid-barcelona-is-worlds-busiest-flight-route.htm). **In February** last year**, a high speed rail line was opened** between the two cities. While I don’t have the exact decrease in frequencies, take a look at this part in the notes to [Iberia’s February traffic results](http://grupo.iberia.es/portal/site/grupoiberia/menuitem.510753be79bbec04e633c4c3d21061ca/?canalPadre=Informacion+Operativa+y+Financiera&anio=2009&mes=1075590000000&image.x=39&image.y=9):According to the new Strategic Plan, the company reduced capacity in the domestic sector by 21.6%, leading to a load factor of 68.7%, similar to the level reached in February 2008. Average stage length grew by 6.5% in this sector, due to the higher reduction of capacity in flights between Barcelona – Madrid (this route began to be operated by the high speed train on the 20th of February 2008).Edit: According to this [Wall Street Journal article](http://online.wsj.com/article/SB124018395386633143.html?mod=googlenews_wsj), the h**igh speed trains have ” snatched half the route’s air-passenger traffic.**” (Hat tip to my dad for the link.)Some **airlines here in the States could definitely be hurt by a high speed rail expansion**. **Any further improvement in the Northeast Corridor could negatively affect the Delta and US Airways shuttle operations,** and I agree with Marshall that **Southwest would get hurt** (I think the intra-Texas and intra-California routes especially). **If this is ends up being an expansion of Amtrak, I’m very worried when it comes to competition with the airline industry**. The **air carriers are motivated by profits and losses** (as they should). If a route isn’t performing well, the airline will adjust accordingly by either eliminating the route or trimming capacity, and the opposite happens on successful routes. **Meanwhile, a government-funded train system with guaranteed funding can continue operating despite being unprofitable, making true competition difficult.**

## Internal Links

### Airline Industry Key to Heg

#### Continued investment in airport infrastructure is key to heg

**DRI•WEFA, Global Insight Company, 2**

(DRI•WEFA is a Global Insight Company, July 2002, “The National Economic Impact of Civil Aviation,” <http://www.aia-aerospace.org/stats/resources/DRI-WEFA_EconomicImpactStudy.pdf>, page 4, Accessed 7/5/12, THW)

On November 27, 2001, just 11 weeks after the terrorist attacks, John Marburger, Director of the White House Office of Science and Technology Policy, reiterated the continued need for investment in the nation’s airports and airways in remarks to the Commission on the Future of the U.S. Aerospace Industry: “We need to develop a 21st Century global air transportation system that provides safe, secure, efficient and affordable transportation of people, goods, and information in peacetime and wartime—enabling people and goods to move freely anywhere, anytime, on time. We need a system that: - Enhances national security by strengthening homeland defense while enabling the military to project power anywhere in the world at any time; - Increases U.S. economic competitiveness by building a more efficient, higher capacity air transportation system; and - Improves the quality of life of all Americans by enabling them to do *what* they want to do *when and where* they want to do it.?3

### Airline Industry Key to Aerospace

#### Airline industry is key to jobs in the aerospace industry

**Conway and Pedersen, Aerospace Futures Alliance of Washington, 6**

(Richard S. Jr., Douglas H., January 2006, Aerospace Futures Alliance of Washington,”The Washington Aerospace Industry,”<http://afa-wa.com/Aerospace_Industry.pdf>, p.1, accessed 7-4-12, JC)

**Air transportation is a vital function of a modern economy. It entails a variety of activities: aerospace manufacturing, air passenger and freight service, airport operations, air traffic control, air transportation arrangement, and other air support services.** Today, including the suppliers of these activities, air transportation employs more than 100,000 people in Washington**. This study focuses on the aerospace industry, which accounts for more than one-half of the employment in air transportation**: • **The Washington aerospace industry primarily manufactures aircraft and parts**. • Led by The Boeing Company, the aerospace industry employed 65,400 people in 2005. • **With an average annual wage of $83,370, more than double the average for all industries, the aerospace industry paid $5.4 billion in wages and salaries**. • Taking into consideration the direct and indirect impact on the economy, the aerospace industry accounted for an estimated 209,300 jobs or 7.5 percent of total state employment. • More than nine out of every ten aerospace employees worked in King County (38,800) and Snohomish County (23,700) in 2005. • The total impact of the industry amounted to 116,400 jobs or 10.1 percent of total employment in King County and 52,100 jobs or 22.9 percent of total employment in Snohomish County. • **The aerospace industry also accounted for 40,800 jobs or 2.9 percent of total employment in the rest of the sta**te. 2. BRIEF HISTORY **The history of the aerospace industry in Washington is almost as long as the history of the airplane.** In 1916, just thirteen years after the Wright brothers took their first heavier-than-air flight at Kitty Hawk, William Boeing founded the Pacific Aero Products Company and soon renamed it the Boeing Airplane Company. Initially, Pacific Aero Products employed 16 workers earning 14 to 40 cents per hour. Selling bi-planes (Model Cs) to the navy and army during World War I, the Seattle company emerged from the conflict as a major aircraft manufacturer**. After the war, Boeing devoted much of its effort to developing aircraft for a promising commercial market.** The airline industry began in 1925 when Congress turned over the job of flying mail to private contractors. Boeing formed a subsidiary called Boeing Air Transport, the forerunner to United Airlines, and successfully bid on a federal contract to fly mail between San Francisco and Chicago. In 1927, the 23-hour inaugural flight in a Model 40A carried mail as well as two-paying passengers.

**Domestic airline industry strength is key to the aerospace industry**

**Conway and Pedersen, Aerospace Futures Alliance of Washington, 6**

(Richard S. Jr., Douglas H., January 2006, Aerospace Futures Alliance of Washington,”The Washington Aerospace Industry,”<http://afa-wa.com/Aerospace_Industry.pdf>, p.5, accessed 7-4-12, JC)

**Volatile demand. The demand for aircraft, whether stemming from the military or the world airline industry, is highly volatile. Given that Boeing is a major employer, the fluctuations in aircraft demand have often sent ripples throughout the state economy. The ramp-up in Boeing production during World War II, which led to 40,000 new jobs, helped pull the Seattle area out of the Great Depression.** **The subsequent lay-offs at the conclusion of the war precipitated a recession**. Despite a declining employment share, the aerospace industry can still impart significant fluctuations to the Washington economy (Figure 4). **Surging aerospace employment coupled with a strong national economy triggered state economic booms in the late 1970s, 1980s, and 1990s**. Spurred by 48,000 new hires in the aerospace industry, the 1983-90 expansion created fully one-fifth of the jobs in the state economy today. **Back-to-back aerospace slumps contributed substantially to the last recession.**

**Aerospace dependent on airline industry**

Gomez et al, Harvard undergraduate, degree in quantitative finance, 12

(Ben H., John Simon, Alan Ibrahim, 2012, Wikinvest, “Dependence on key customers”, <http://www.wikinvest.com/stock/Precision_Castparts_(PCP)>, accessed 7-4-12, JC)

PCP’s **commercial sales depend substantially on the production rates of both Boeing Company (BA) and Airbus , which in turn depend upon deliveries of new aircraft. The ultimate drivers of orders and deliveries of aircraft are underlying air travel demand, financial health of airlines, growth prospects for airline capacity, and overall economic growth. The current increase in aerospace demand is dependent on increased spending by foreign carriers and domestic airlines who must upgrade aging fleets.** PCP stands to benefit from expected aircraft deliveries by Boeing and Airbus, and from the replacement cycle of aging turbines and aircraft that will be upgraded or overhauled. Any factor that adversely affects the aerospace industry (similar to the tragic events of 9/11 or the SARS travel scare) would likely pressure PCP’s operations and profitability. **Bankruptcy of another airline**, continued high oil prices, or the possibility of a major terrorist attack **threaten to change the course of the recovery in the aerospace cycle and likely impact PCP.**

**Aerospace key to economy**

**Aerospace Industries Association of America, 9**

(9-9-09, Aerospace Industries Association of America, “Aerospace and Defense: The Strength to Lift America”, <http://www.aia-aerospace.org/assets/wp_strength_aug09.pdf>, p. 1, accessed 7-4-12, JC)

As the U.S. economy moves through uncertain times, **America’s aerospace industry remains a powerful, reliable engine of employment, innovation, and export income. Aerospace contributed $95.1billion in export sales to America’s economy last year**.1 Conservatively, **U.S. aerospace sales alone account for 3-5 percent of our country’s g**ross **d**omestic **p**roduct, **and every aerospace dollar yields an extra $1.50 to $3** in further economic activity.2 **Aerospace products and services are pillars of our nation’s security and competitiveness**. In these challenging times, **the aerospace industry is solidly and reliably contributing strongly to the national economy and the lives of millions of Americans.** We strongly believe that **keeping this economic workhorse on track is in America’s best interest**, To accomplish this, **our government must develop policies that strengthen the positions of all workers in all industries, especially economic producers like aerospace and defense.** This paper explains what’s at stake, and ways to ensure that a proven economic success continues to endure and thrive.

### Aerospace Key to Heg

**Strong aerospace key to overall US hegemony—even a moderate decline in the industry would be disastrous**

**Thompson, American Institute of Aeronautics and Astronautics, President, 9**

(David, 12-10-09, Federal News Service, “The Aerospace Workforce”, Lexis Nexis, accessed 7-4-12, JC)

**Aerospace systems are of considerable importance to U.S. national security, economic prosperity, technological vitality, and global leadership. Aeronautical and space systems protect our citizens, armed forces, and allies abroad. They connect the farthest corners of the world with safe and efficient air transportation and satellite communications**, and they monitor the Earth, explore the solar system, and study the wider universe. The U.S. aerospace sector also contributes in major ways to America's economic output and high- technology employment. Aerospace research and development and manufacturing companies generated approximately $240 billion in sales in 2008, or nearly 1.75 percent of our country's gross national product. They currently employ about 650,000 people throughout our country. U.S. government agencies and departments engaged in aerospace research and operations add another 125,000 employees to the sector's workforce, bringing the total to over 775,000 people. Included in this number are more than 200,000 engineers and scientists -- one of the largest concentrations of technical brainpower on Earth. However, the U.S. aerospace workforce is now facing the most serious demographic challenge in his 100-year history. Simply put, today, many more older, experienced professionals are retiring from or otherwise leaving our industrial and governmental aerospace workforce than early career professionals are entering it. This imbalance is expected to become even more severe over the next five years as the final members of the Apollo-era generation of engineers and scientists complete 40- or 45-year careers and transition to well-deserved retirements. In fact, around 50 percent of the current aerospace workforce will be eligible for retirement within just the next five years. Meanwhile, the supply of younger aerospace engineers and scientists entering the industry is woefully insufficient to replace the mounting wave of retirements and other departures that we see in the near future. In part, this is the result of broader technical career trends as engineering and science graduates from our country's universities continue a multi-decade decline, even as the demand for their knowledge and skills in aerospace and other industries keeps increasing. Today, only about 15 percent of U.S. students earn their first college degree in engineering or science, well behind the 40 or 50 percent levels seen in many European and Asian countries. Due to the dual-use nature of aerospace technology and the limited supply of visas available to highly-qualified non-U.S. citizens, our industry's ability to hire the best and brightest graduates from overseas is also severely constrained. As a result, unless effective action is taken to reverse current trends, the U.S. aerospace sector is expected to experience a dramatic decrease in its technical workforce over the next decade. Your second question concerns the implications of a cutback in human spaceflight programs. AIAA's view on this is as follows. While U.S. human spaceflight programs directly employ somewhat less than 10 percent of our country's aerospace workers, its influence on attracting and motivating tomorrow's aerospace professionals is much greater than its immediate employment contribution. For nearly 50 years the excitement and challenge of human spaceflight have been tremendously important factors in the decisions of generations of young people to prepare for and to pursue careers in the aerospace sector. This remains true today, as indicated by hundreds of testimonies AIAA members have recorded over the past two years, a few of which I'll show in brief video interviews at the end of my statement. Further evidence of the catalytic role of human space missions is found in a recent study conducted earlier this year by MIT which found that 40 percent of current aerospace engineering undergraduates cited human space programs as the main reason they chose this field of study. Therefore, I think it can be predicted with high confidence that a major cutback in U.S. human space programs would be substantially detrimental to the future of the aerospace workforce. Such a cutback would put even greater stress on an already weakened strategic sector of our domestic high-technology workforce. Your final question centers on other issues that should be considered as decisions are made on the funding and direction for NASA, particularly in the human spaceflight area. In conclusion, AIAA offers the following suggestions in this regard. Beyond the previously noted critical influence on the future supply of aerospace professionals, administration and congressional leaders should also consider the collateral damage to the space industrial base if human space programs were substantially curtailed. Due to low annual production rates and highly-specialized product requirements, **the domestic supply chain for space systems is relatively fragile. Many** second- and third-tier **suppliers** in particular **operate at marginal volumes today, so even a small reduction in their business could force some critical suppliers to exit this sector**. Human space programs represent around 20 percent of the $47 billion in total U.S. space and missile systems sales from 2008. Accordingly, **a major cutback** in human space spending **could have large and highly adverse ripple effects throughout commercial, defense**, and scientific space **programs as well**, potentially **triggering a series of disruptive changes in the** **common industrial supply base that our entire** space **sector relies on.**

**Aerospace key to military dominance and tech development**

Erickson, Princeton, PhD Candidate, 4

(Andrew, February 19-21, 2004, East-West Institute, “Seizing the Highest Ground,” <http://www.eastwestcenter.org/fileadmin/stored/pdfs/IGSCwp003.pdf>, p. 5, accessed 7-4-12, JC)

**Aerospace is** 1) **critical to military dominance and** 2) **important to overall technological development.** **With boundless potential for scientific advance, it promises tremendous military, economic, and political rewards.** Aerospace offers established powers unprecedented opportunities to enhance their geopolitical edge. **Critical to great power status today, “Space operations and activities utilizing space-based assets have broad implications for national power in peace and war… military operations in space are extensively interrelated with national and political interests, and any action in space, even minor ones, can impact the balance of wealth and power among nations.”**24 Growing **powers** therefore naturally **regard aerospace development as critical to achieving great power status**, established great powers to maintaining it. Studying a nation’s aerospace development therefore offers key insights into its great power ambitions and its capacity to realize them.

### Aerospace Key to Economy

**US aerospace industry key to revitalize the economy – creates jobs and fuels trade**

#### Trupo, Department of Commerce, International Trade Administrator, 11

(Mary, 6-21-11, International Trade Administration, “Aersopace Industry Critical Contributor to US Economy,”<http://trade.gov/press/press-releases/2011/aerospace-industry-critical-contributor-to-us-economy-062111.asp>, accessed 7-4-12, JC)

Francisco **Sánchez, Under Secretary of Commerce for International Trade, addressed national and international groups** at the 2011 Paris Air Show to reinforce the President’s National Export Initiative (NEI) and **support the U.S. aerospace industry**. “The **U.S. aerospace industry is a strategic contributor to the economy, national security, and technological innovation of the United States,”** Sánchez said. **“The industry is key to achieving the President’s goals of doubling exports by the end of 2014 and contributed $78 billion in export sales to the U.S. economy in 2010.”** During the U.S. Pavilion opening remarks, Sánchez noted that the **aerospace sector in the United States supports more jobs through exports than any other industry.** Sánchez witnessed a signing ceremony between Boeing and Aeroflot, Russia’s state-owned airline. Aeroflot has ordered eight 777s valued at $2.1 billion, and the sales will support approximately 14,000 jobs. **“The 218 American companies represented in the U.S. International Pavilion demonstrate the innovation and hard work that make us leaders in this sector,”** said Sánchez. “I am particularly pleased to see the incredible accomplishments of U.S. companies participating in the Alternative Aviation Fuels Showcase, which demonstrates our leadership in this important sector and shows that we are on the right path to achieving the clean energy future envisioned by President Obama.”

**Aerospace key to economy - trade**

Government Accountability Office, 6

(9-6-6, Government Accountability Office, “U.S. AEROSPACE

INDUSTRY…,” <http://www.gao.gov/new.items/d06920.pdf>, p. 5, accessed 7-4-12, JC)

**The impact of the aerospace industry on the U.S. economy is significant, with the industry estimating $170 billion in sales and approximately 625,000 people employed in 2005. 5 The importance of this industry to the U.S. economy will continue to grow in the future**. According to FAA, the U.S. commercial aircraft fleet is estimated to grow from 7,836 in 2005 to 10,677 in 2017. Both passenger capacity and cargo operations are expected to continue to grow, with passenger capacity in 2007 increasing by 4.6 percent and then increasing by an average of 4.2 percent per year until 2017. **FAA estimates that over 1 billion passengers will use U.S. airports by 2015. Domestic cargo revenue-ton miles are projected to increase at an average annual rate of 3.2 percent until 2017, exceeding 23 billion. Furthermore, the U.S. aerospace industry consistently shows a foreign trade surplus—reaching $31 billion in 2004. Aerospace exports constituted 6.9 percent of the total value of U.S.-exported merchandise in 2004.**

## Impacts

### Aviation Key to Free Trade

#### Airplanes key to global market success and free trade

DRI·WEFA, A Global Insight Company, 2

(DRIWEFA, privately owned consulting firm providing a wide range of services to the aviation industry, “The National Economic Impact of Civil Aviation,” <http://www.aia-aerospace.org/stats/resources/DRI-WEFA_EconomicImpactStudy.pdf>, p. 23, accessed 7-3-12, THW)

**The disadvantages** associated with the baseline future case examined in this study **will detrimentally affect economic activity within the United States; they also will constrain the ability of the United States to compete in global markets**. This section identifies the degree of global competition among nations, explores the key ways that this competition can be affected, illustrates how **the United States currently competes globally, and** suggests how **the U.S. global competitive stance could be affected by the disadvantages associated with increasing air traffic delays.** *Air Transportation and Economic Growth: From Economic Nationalism to a Global Economy* Since World War II, a key direction of global commerce has been the increasing integration of national economic activity. Industrial nations came together to form the Organization for Economic Corporation and Development (OECD). The General Agreement on Tariffs and Trade (GATT) was formed and then superseded by the World Trade Organization (WTO) to help facilitate a new era of accelerated global trade. These **trends reflect the global integration of economies as business increasingly sought not only to sell its products into wider markets, but also to coordinate production and distribution across national borders.** Every region of the world has participated in these trends except for the Middle East, whose export statistics are distorted by the region’s huge exports of petroleum and related products. This steady increase in trade activity has been enhanced by the growth of global air transportation.

### Aviation – Competitiveness

#### Investment in aviation is key to globalization and airport safety

Winston, Brooking’s Institute, Senior Fellow & de Rus, University of Las Palmas de Gran Canaria, Economics Professor, 8

(Clifford, Ginés, Aviation Infrastructure Performance: A Study in Comparative Political Economy, p. 1-2, THW)

The increasing interdependence of firms and individuals throughout the world—popularly defined as globalization—has been greatly facilitated by air transportation. In 2005 the world’s airlines carried roughly 2 billion passengers, more than one-third of whom were traveling for business or pleasure to another country. For the next several years, the world’s air traffic is expected to grow about 6 percent annually. Globalization can enable a nation to develop and benefit from its comparative advantage in commodities and services including tourism, but a nation must have adequate infrastructure to realize its comparative advantage. For example, a country must have a network of airports that are capable of handling operations by large jets safely and efficiently as well as an air traffic control system that uses the latest technology to optimize routings and prevent accidents. Accordingly, many countries have made substantial investments in aviation infrastructure. Currently some 49,000 airports are operating in the world, with 3,500 of them providing scheduled passenger service. The United States has 19,000, or 40 percent of the world’s airports; of those, 663 provide scheduled passenger service. Radar-based air traffic control systems have been implemented to guide aircraft, especially in heavily used domestic and international air space, and some countries are planning to shift to satellite-based technology over the coming decades. Investments in aviation infrastructure have undoubtedly contributed to the long-run improvement in airline safety. During 2005 the world’s scheduled airlines experience only 0.02 passenger fatalities per 100 million passenger-kilometers. But if air travel safety is to continue to improve, aviation infrastructure must be able to accommodate the growing demand for air travel. In fact, this concern has motivated certain countries to begin development of a satellite-based air traffic control system, which is capable of safely handling more aircraft than radar-based systems can. At the same time, the continuing failure of policymakers to implement efficient pricing of and investment in airports and air traffic control has generated significant costs in those parts of the world where air transportation is heavily used and means that travelers and carriers can expect to incur longer and more irritating delays to prevent safety from deteriorating. An additional concern is that the benefits of global liberalization of airline ownership and economic regulation will not be fully realize if airline entry at major airports is impeded by a lack of available gates and takeoff and landing times. For example, in its recent negotiations with the European Union to liberalize the trans-Atlantic airline market, the U.S. government raised concerns about capacity constraints at the EU’s major hub airports.

#### That solves multiple scenarios for extinction

Panzner, New York Institute of Finance Instructor, 8

(Michael J., 25-year veteran of the global stock, bond, and currency markets who has worked in New York and London for HSBC, Soros Funds, ABN Amro, Dresdner Bank, and JPMorgan Chase Michael, “Financial Armageddon: Protect Your Future from Economic Collapse,” p. 136-138, THW)

Continuing calls for curbs on the flow of finance and trade will inspire the United States and other nations to spew forth protectionist legislation like the notorious Smoot-Hawley bill. Introduced at the start of the Great Depression, it triggered a series of tit-for-tat economic responses, which many commentators believe helped turn a serious economic downturn into a prolonged and devastating global disaster. But if history is any guide, those lessons will have been long forgotten during the next collapse. Eventually, fed by a mood of desperation and growing public anger, restrictions on trade, finance, investment, and immigration will almost certainly intensify. Authorities and ordinary citizens will likely scrutinize the cross-border movement of Americans and outsiders alike, and lawmakers may even call for a general crackdown on nonessential travel. Meanwhile, many nations will make transporting or sending funds to other countries exceedingly difficult. As desperate officials try to limit the fallout from decades of ill-conceived, corrupt, and reckless policies, they will introduce controls on foreign exchange. Foreign individuals and companies seeking to acquire certain American infrastructure assets, or trying to buy property and other assets on the cheap thanks to a rapidly depreciating dollar, will be stymied by limits on investment by noncitizens. Those efforts will cause spasms to ripple across economies and markets, disrupting global payment, settlement, and clearing mechanisms. All of this will, of course, continue to undermine business confidence and consumer spending. In a world of lockouts and lockdowns, any link that transmits systemic financial pressures across markets through arbitrage or portfolio-based risk management, or that allows diseases to be easily spread from one country to the next by tourists and wildlife, or that otherwise facilitates unwelcome exchanges of any kind will be viewed with suspicion and dealt with accordingly. The rise in isolationism and protectionism will bring about ever more heated arguments and dangerous confrontations over shared sources of oil, gas, and other key commodities as well as factors of production that must, out of necessity, be acquired from less-than-friendly nations. Whether involving raw materials used in strategic industries or basic necessities such as food, water, and energy, efforts to secure adequate supplies will take increasing precedence in a world where demand seems constantly out of kilter with supply. Disputes over the misuse, overuse, and pollution of the environment and natural resources will become more commonplace. Around the world, such tensions will give rise to full-scale military encounters, often with minimal provocation. In some instances, economic conditions will serve as a convenient pretext for conflicts that stem from cultural and religious differences. Alternatively, nations may look to divert attention away from domestic problems by channeling frustration and populist sentiment toward other countries and cultures. Enabled by cheap technology and the waning threat of American retribution, terrorist groups will likely boost the frequency and scale of their horrifying attacks, bringing the threat of random violence to a whole new level. Turbulent conditions will encourage aggressive saber rattling and interdictions by rogue nations running amok. Age-old clashes will also take on a new, more heated sense of urgency. China will likely assume an increasingly belligerent posture toward Taiwan, while Iran may embark on overt colonization of its neighbors in the Mideast. Israel, for its part, may look to draw a dwindling list of allies from around the world into a growing number of conflicts. Some observers, like John Mearsheimer, a political scientist at the University of Chicago, have even speculated that an “intense confrontation” between the United States and China is “inevitable” at some point. More than a few disputes will turn out to be almost wholly ideological. Growing cultural and religious differences will be transformed from wars of words to battles soaked in blood. Long-simmering resentments could also degenerate quickly, spurring the basest of human instincts and triggering genocidal acts. Terrorists employing biological or nuclear weapons will vie with conventional forces using jets, cruise missiles, and bunker-busting bombs to cause widespread destruction. Many will interpret stepped-up conflicts between Muslims and Western societies as the beginnings of a new world war.

### Air Power – Rogue Nations

#### Air power solves conflict – contains rogue nations

McKenzie, flight lieutenant, 12

(Sandy, Spring 2012, Royal Air Force Centre for Air Power Studies, “The Renaissance of Air Power,” <http://www.airpowerstudies.co.uk/APR%20Vol%2015%20No%201.pdf>, p. 94, accessed 7-3-12, THW)

Renaissance of Air Power As outlined above, the ‘New World Disorder’ that unfolded in the aftermath of the Cold War has provided numerous examples in which the utility of air power is evident across the spectrum of conflict. However, it is in the future that air power is likely to prosper most as postmodern governments shy away from expensive, inconclusive and arguably counterproductive counter insurgency campaigns. Air power will never succeed in delivering policy ends in isolation, but given the necessary preconditions, as illuminated in Libya, and hard headed objectives, it will offer politicians the opportunity to seize ‘relative advantage’ in crises that are too important to ignore, but too costly to fully resource. Change will be necessary in order that a true renaissance can flourish. Indeed ‘algorithmic warfare’ and data exploitation will become far more challenging than, for example, operating remotely piloted vehicles in high threat environments. Nonetheless, air power will remain the primary means of operating at range, in support of indigenous forces, interdicting a belligerent’s military capability, or containing rogue states. As events in Libya have proven, the renaissance may just be beginning. Recent analysis has concluded that, in Libya, ‘foreign air power comprised the rebels’ asymmetric advantage, without which their uprising would almost certainly have been quelled by Gaddafi’s forces. For proponents of air power, the outcome illustrated its judicious application, showing the way for foreign intervention in future local conflicts in spite of the general fatigue with the wars in Iraq and Afghanistan.’ 24 Indeed, the current Chief of the Air Staff appears to have been particularly prescient when arguing in early 2010 that: ‘Unfortunately, it’s only too easy for a foreign contingent to be portrayed as an alien and occupying force; it’s much better for the majority of ‘boots on the ground’ to be indigenous, supported and assisted by appropriate and highly trained specialists and Special Operations Forces with access to the higher-tech capabilities – including air and space power – that are difficult for local security forces to acquire and operate.’ 25 Ultimately, air power will never remove the requirement for complimentary land and maritime components; however to suggest it is in decline fails to grasp the new dawn of strategic calculation that confronts us. Alexander de Seversky famously argued that ‘air power speaks a strategic language’. 2 6 He could have had no idea how correct he would be.

### Air Power - China

#### Air power is key to check Chinese aggression

Slawson, United States Air Force, Lieutenant Colonel, 8

(Andrew T., 4-4-08, Joint Advanced Warfighting School at the National Defense University, “Air Power’s First Among Equals: Why Air Superiority Still Matters,” <http://www.dtic.mil/cgi-bin/GetTRDoc?AD=ada487133>, p. 4-5, accessed 7-3-12, THW)

This may seem a blinding flash of the obvious, however, closer examination presents the US military with a series of challenges in executing these missions. Confronting China over an attack on Taiwan presents multiple challenges for U.S. forces. They are quickly modernizing their air defenses with advanced Russian weaponry. The tyranny of distance presents its own series of challenges for access and sustainment of combat power. In the case of Iran, a potential nuclear armed state, a modernizing air defense network, and a known sponsor of multiple terrorist organizations which will certainly threaten our theater basing is equally problematic. Chinese and Iranian air defenses pose a significant threat to our current aircraft. The Russian arms industry is alive and well, despite the decline in readiness of Russian conventional forces. The Russians continue to develop, field, and alarmingly, export advanced air defense systems capable of challenging the currently fielded 4 th generation aircraft like the USAF’s F-15, F-15E, F16, and the F-18s of the USN and USMC. Air Force Secretary, Michael Wynne recently commented why our 4 th generation fighters need replacing, stating “If we were to engage Iran or Venezuela in an air campaign no fourth generation fighters—including the F-15 Eagle, the F-16 Falcon and the Navy’s F/A-18 Hornet—would be able to participate.” 7 Advanced Russian air defense systems, if deployed, would render our current strike inventory at significant risk. Our 2005 National Defense Strategy lays out how we will accomplish our objectives in support of the National Security Strategy: 1) Assure allies and friends, 2) Dissuade potential adversaries, 3) Deter aggression and counter coercion, 4) Defeat adversaries. One of the assumptions listed as the underpinning of this strategy is that “we will have no global peer competitor and will remain unmatched in traditional military capability.” 8 Our current 4 th generation air superiority fighters, despite reigning undisputed for the last 30 years, are well past their intended service life and lack the stealthy requirements to defeat advanced surface to air systems. While this author does not doubt the bravery, superior doctrine, and training of our airman, I am extremely concerned that our commitment to the funding of future air superiority fighters, in the face of an enemy equipped with sophisticated fighters and surface to air systems, is insufficient. The real question is what the potential loss or even inability to achieve air superiority means for the JFC? If at all, how does it limit his ability to execute U.S. national objectives. “Air superiority is, however, merely a means towards the end; it is a state in which the exercise of air power becomes possible.” 9 In fact, air power, enables the exercise of all military power that the JFC can bring to bear. Let me make it clear that while this topic is written by an Air Force officer, this paper advocates a capability, not a platform, nor that the Air Force must be the only force equipped for this mission. George Washington’s words written in 1780 are still hauntingly true today: “There is nothing likely to produce peace as to be well prepared to meet an enemy.” 10

# Airline Trade-Off – Aff Answers

## Uniqueness Answers

### Decline Now – Multiple Reasons

**High fuel prices and economic trends crushing the airline industry now**

**Wall Street Journal, 6-5-12**

(6-5-12, Wall Street Journal, “Global Airlines Fly Into 'Storm,”

<http://online.wsj.com/article/SB10001424052702303918204577448033877417726.html>, accessed 7-4-12, JC)

**Higher fuel costs and a treacherous economic environment are weighing on global airlines,** including Qantas and Emirates Airline. Asia's carriers last year earned 47% less in net profit than in 2010, at US$4.8 billion, according to the Association of Asia Pacific Airlines. Last month, Cathay Pacific Airways Ltd. said it was considering whether to accelerate the retirement of aging aircraft after it warned of "disappointing" first-half financial results. Singapore Airlines Ltd. and Korean Airlines recently posted quarterly losses, forcing both to rethink schedules and adjust aircraft deployment to boost profits. **Even fast-growing Middle East airlines, once perceived to be immune from global trends, have started to voice concern about business conditions.** "**It's a perfect storm of adversity now facing airlines,"** Tim Clark, president of Dubai-based Emirates Airline, said in an interview. "The euro is going south, the pound is going south, fuel costs are still too high." Amid those challenges, though, Etihad Airways of Abu Dhabi said Tuesday it has bought a nearly 4% stake in Qantas rival [Virgin Australia](http://online.wsj.com/public/quotes/main.html?type=djn&symbol=VAH.AU) Ltd. [VAH.AU 0.00%](http://online.wsj.com/public/quotes/main.html?type=djn&symbol=VAH.AU) Shares in Virgin Australia closed at 41 Australian cents (40 U.S. cents) each Monday, leaving the company with a market capitalization of 906.2 million Australian dollars (US$881.5 million). That gives an implied valuation of A$35.9 million on Etihad's 3.96% stake. A spokesman for Etihad said it would like to raise its holding to at least 10%. Etihad operates 24 flights a week between Abu Dhabi in the Persian Gulf and Australia.

Mr. Clark of Emirates cautioned that **many global carriers could be forced to retrench**. Last month, Emirates said its latest fiscal-year net profit fell 72% after the company took a US$1.6 billion hit from high fuel costs. Mr. Clark added Tuesday that t**he price of Brent crude oil will need to drop to between US$80 and US$90 a barrel, from about US$100, to revive margins.**

#### The world’s airline industries are down economically

ABN Digital, 12

(7/8/12, ABN Digital, “Global Forecasts for Aviation Industry in 2012,” <http://www.abndigital.com/page/multimedia/video/power-lunch/1140101-Global-Forecasts-for-Aviation-Industry-in-2012>, Accessed: 7/8/12, GJV)

According to the International Air Transport Association the global airline industry will continue to perform poorly this year in light of the rising cost of fuel and weak economies. IATA forecasts that airlines will continue to see declines in revenues, generating profits of only $ 3.5 billion this year, a drop from the estimated $ 6.9 billion in 2011. Regional Manager of Emirates, Fouad Caunhye spoke to ABN’s Uche Okoronkwo about the future of the industry and plans to manage the bleak outlook.

#### The world’s airline industries are collapsing

Topham, Guardian and Observer's transport correspondent, 12

(Gwyn, 6/16/12, The Guardian, “Airline industry faces grim year as Gulf carriers take over the world,” <http://www.guardian.co.uk/business/2012/jun/17/airline-industry-streamline-euro-crisis-fuel-costs>, Accessed: 7/8/12, GJV)

The leaders of airlines from every continent jetted into Beijing last week, escorted by their hosts to a banquet in the very heart of China's political establishment – the Great Hall of the People in Tiananmen Square. Given the red carpet treatment and majestic setting, few onlookers might have thought this was an industry in crisis. Yet when the talking started, the state of aviation was summed up in a word that belies the traditional macho swagger of airline bosses: fragile. The annual global summit of the International Air Transport Association (Iata) has resembled a United Nations of airlines, filled with delegates from the flag carriers of countries around the world. But the borders are becoming less distinct as the likes of British Airways and Iberia, Air France and KLM merge and consolidate, seeking to cut costs rather than struggle on alone. This is an industry that has already made a multibillion-dollar global loss in seven of the last 12 years: and for European airlines, in the eye of the economic storm, losses are predicted to top $1bn this year. Tony Tyler, the genial president of Iata, refused to predict names or numbers but, when pressed, conceded that more airlines would doubtless go bust soon – and even the biggest names were not immune. Perhaps only the cash-rich Gulf carriers can sit easy. From the platform, Akbar al-Baker, the chief executive of Qatar Airways, delivered an unnerving prediction with a grin: "When we meet again next year," he declared, "there will be far fewer of you sitting there."

#### Airline industry low now – no recovery

Harned, Sanford C. Bernstein and Company, Vice President, et al., 2

(Doug S., Peter R. Costa, First Financial Services, Financial Advisor, Jerrold T. Lundquist, director at McKinsey and Company, June 2002, McKinsey Quarterly, “Rethinking the aviation industry”, <http://www.mckinseyquarterly.com/Rethinking_the_aviation_industry_1190>, accessed 7-6-12, JC)

Nowhere have signs of an economic upturn in the US economy been welcomed more eagerly than in the commercial-airline industry. Already ailing from the global economic slump early in 2001, airlines then became the prime industry victim of the September 11 terrorist attacks. The impact of the current downturn in air travel has been severe not just on the airlines but also on lessors and aircraft manufacturers, which have seen their order books shrink as a result of numerous cancellations and postponements. Now, with signs of an economic updraft accumulating, many across the industry express hopes that demand will recover quickly. The optimists point to increases in travel during the first quarter of 2002 and also assume that the airlines learned how to manage cyclicality better after the last cycle.

We do not expect such an optimistic scenario of recovery but rather see airlines struggling with a far more complicated and difficult trajectory. At a time of unprecedented risk and uncertainty for the industry, an examination of its fundamentals reveals nothing to suggest that this downturn will be any shorter or less severe than previous ones, which typically lasted at least three to four years.

### Decline Now – Lack of Funding

#### More funding needed for aviation now

Building America’s Future Educational Fund, 11

(Building America’s Future Educational Fund, a bipartisan coalition of elected officials dedicated to bringing about a new era of U.S. investment in infrastructure, 2011, Building America’s Future Educational Fund, “Building America’s Future: Falling Apart and Falling Behind,” <http://www.bafuture.com/sites/default/files/Report_0.pdf,> p. 38, accessed 7-3-12, THW)

Implementing the Next Generation aviation system. Air traffic control is managed by the same radar system we’ve had since the 1950s, even though data-driven and satellite-based systems have been developed. The U.S. has the world’s worst air traffic congestion—and 37% of delays can be attributed to our outdated air traffic control system. In the three New York City airports, nearly two-thirds of delays are caused by air traffic control problems, creating ripple effects of delays around the country. An investment in the Next Gen satellite-based airplane traffic control system will reduce air travel congestion and delays, and more efficient air traffic patterns will increase fuel efficiency. The Federal Aviation Administration has begun initial phases of Next Gen implementation and has developed a plan to fully adopt the new system by 2018. Congress and the Administration should work to guarantee funding for this project to be completed on time. Improving facilities at economically strategic airports. The FAA’s Airport Improvement Program invested $2.6 billion in airport facilities in 2009—but less than a quarter of that investment went to the country’s largest metropolitan airport hubs, which serve nearly three-quarters of U.S. passengers. 5 Federal policy should commit to expanding capacity and easing congestion in the nation’s largest airport hubs, where inadequate facilities take the biggest toll on economic activity and cause ripple effects around the country.

### Aerospace Decline Inevitable

#### Aerospace industry has an old work force – skilled people retiring soon

U.S. Department of Labor, Employment & Training Administration, 5

(May 2005, United States Department of Labor, Employment, and Training Administration, “America’s Aerospace Industry: Identifying and Addressing Workforce Challenges,” <http://www.doleta.gov/brg/indprof/aerospace_report.pdf>, p. 4, accessed 7-3-12, THW)

The Aging Workforce—**Stakeholders representing the aerospace industry expressed concern about the aging workforce. About 26 percent of aerospace workers will be eligible to retire by 2008. The average production worker is 53 years of age3 and the average engineer is 54 years of age.**4 Participants wanted to establish an annually updated national database of skills/competency gaps focusing on training program money on 1 year and 5 year gaps (projected) identified by centers, companies and agencies and managed by them; establish the relevance of the aerospace industry in education and the workforce; and establish a phased retirement program.

**Massive loss of workers- not enough people to fill the high tech jobs**

U.S. Department of Labor, Employment & Training Administration, 5

(May 2005, United States Department of Labor, Employment, and Training Administration, “America’s Aerospace Industry: Identifying and Addressing Workforce Challenges,” <http://www.doleta.gov/brg/indprof/aerospace_report.pdf>, p. 4, accessed 7-3-12, THW)

The Loss of Technical Talent—**The industry is having a difficult time retaining its existing workforce, attracting young people into the field and building its skills base.** Some solutions examined include sponsoring a meeting with industry partners and educators where future specific skill sets are identified, and educators transfer these skill sets into new curricula and courses; **increasing hands-on interactive learning in the classrooms, including increasing technology access, teachers with experience, gearing classes toward specific interests and teaching what industry needs; and identifying high-tech skills, including identifying and training vital skills sets as defined by industry, certifying skill sets to standards after hands on training, rewarding training with pay and creating baseline core competencies and technical skills levels**.

## Link Answers

### No Link – No Trade-Off

#### Airport security investments will develop high speed rail – proves no trade-off

Polzin, Center for Urban Transportation Research, transit research program director, 2

(Steven E., 2002, U.S. Department of Transportation, “Security Considerations In Transportation Planning: A White Paper,” <http://www.planning.dot.gov/documents/SecurityPapers/SecurityConsiderations_Polzin.htm>, accessed 7-2-12, THW)

Post September 11 , actions suggest a variety of possible investment needs as a result of increased sensitivity to security risks. These needs range from near-term initiatives to conduct strategic planning and assessments to supporting enhanced enforcement levels such as those found at airports, to longer-term needs to alter the physical characteristics of individual transportation investments and the system or network of investments. Changes could range from rerouting roadway alignments from sensitive sites to removing trash containers from rail station platforms. Enhancements to ITS technology as a tool to utilize in incident prevention and incident response have been contemplated, and simple design changes to enable additional vehicle inspection queues at border crossings or luggage and passenger scanning capacity at airports may be necessary. Revisiting the capability of our transportation network to handle special vehicles or military equipment in response to incidents or the exploration of modifications in our roadway network to more easily enable mass exodus from an urban area in response to a crisis are among the more complex and expensive strategies that might be pursued. Other major financial obligations could occur if decisions to change the connectivity or range of modal options in our transportation system were to move forward. Several interests, for example, have proposed major investments in high-speed rail in order to provide an alternative to dependency on air travel for longer distance trips. Additionally, certain travel behavior changes could result in different demands for transportation by various modes than are currently anticipated. This could result in changes in modal priorities, shifting geographic priorities, changes in project costs due to design or other security related changes, or other shifts in long-range transportation facility and service plans.

#### No link – joint ticketing solves

Wen, China Daily, 4-24-12

(Wang, 4-24-12, China Daily, “Airlines link up with high-speed rail services,” <http://www.chinadaily.com.cn/bizchina/2012-04/24/content_15124568.htm>, Accessed 7-3-12, THW)

China's high-speed rail service has been operating for two years and has had a broad, adverse effect on airlines' domestic business. Areas that are getting high-speed rail service are also the most profitable for airlines. All three major State-owned airlines cited high-speed rail service as a factor affecting revenue in their financial reports.

Joint ticketing for airlines and high-speed rail lines could be a way for air carriers to profit from China's high-speed rail system, analysts said. "High-speed rail services heavily affect the business of flights of less than 500 kilometers," said Yuan Huifang, deputy general manager of marketing and sales at Hainan Airlines. "But we want to find a way to cooperate with rail systems." Yuan said joint ticketing can help both sides get more passengers. However, it's not easy for airlines and railways to work together. Hainan Airlines took almost one year to prepare for the program, and it was difficult to combine the two different ticketing systems, said Wang Yue, manager of product development at Hainan Airlines. Also, joint operation requires convenient transfers, but few Chinese airports can meet that need. For that reason, Hainan Airlines will promote the program more heavily on international destinations rather than adding more domestic cities, Yuan said. "I believe more railway stations and airports will be built together for joint operations," she added.

#### High speed rail doesn't offset aviation – frees up necessary capacity

**Rus, University of Las Palmas, Department of Economics, 12**

(Gines De, May 2012, Joint Transport Research Centre, “The Economic Effects of High Speed Rail Investment,” <http://www.internationaltransportforum.org/jtrc/discussionpapers/dp200816.pdf>, pg. 6, accessed 7-6-12, JC)

Investing in HSR is on the front line of action to revitalize the railways. The ultimate objective is to change modal split in passenger transport with the aim of reducing congestion, accidents and environmental externalities. HSR investment is seen as a second best policy with the aim of changing modal split in the benefit of the railways.2

High speed trains require high speed infrastructure, meaning that new dedicated track need to be built at a cost substantially higher than the conventional rail line. Infrastructure maintenance cost is comparable with conventional rail but the building costs and the acquisition, operation and maintenance costs of specific rolling stock make this transport alternative an expensive option. In any case, the cost of the HSR is not the point. The economic problem is whether the social benefits are high enough to compensate the infrastructure and operating costs of the new transport alternative. Even this being the case, other relevant alternatives should be examined and compared with the investment in HSR.

HSR competes with air and road transport within some very specific distances and it is also considered as a substitute of feeder air services to main hub airports (Banister and Givoni, 2006). In any case, spending public money in the construction of HSR lines has been defended as a socially desirable public investment which produces several types of benefits such as passenger time savings, increase in comfort, generation of new trips, reduction in congestion and delays in roads and airports, reduction in accidents, reduction in environmental externalities, release of needed capacity in airports and conventional rail lines, and wider economic benefits including the development of the less developed regions.

#### No link – complementary – high speed rail doesn’t compete with air travel

**De Rus, Professor of Economics at University of Las Palmas, 8**

(Ginés De Rus, University of Las Palmas Spain, JOINT TRANSPORT RESEARCH CENTRE Discussion Paper No. 2008-16, Published October 2008, revised May 2012, “The Economic Effects of High Speed Rail Investment,” <http://www.internationaltransportforum.org/jtrc/discussionpapers/dp200816.pdf>, Pages 16-17, Accessed 7/2/12, THW)

HSR competes with air and road transport within some very specific distances and it is also considered as a substitute of feeder air services to main hub airports (Banister and Givoni, 2006). In any case, spending public money in the construction of HSR lines has been defended as a socially desirable public investment which produces several types of benefits such as passenger time savings, 1 `The fact is that, almost two centuries after the first train ran, the railways are still a means of transport with major potential, and it is renewal of the railways which is the key to achieving modal rebalance. This will require ambitious measures which do not depend on European regulations alone but must be driven by the stakeholders in the sector´. European Commission (2001a). 2 `Intermodality with rail must produce significant capacity gains by transforming competition between rail and air into complementary between the two modes, with high-speed train connections between cities. We can no longer think of maintaining air links to destinations for where there is a competitive high-speed rail alternative. In this way, capacity could be transferred to routes where no high-speed rail service exists´. European Commission (2001a).De Rus — Discussion Paper 2008-16 revised — © OECD/ITF, 2008 7 increase in comfort, generation of new trips, reduction in congestion and delays in roads and airports, reduction in accidents, reduction in environmental externalities, release of needed capacity in airports and conventional rail lines, and wider economic benefits including the development of the less developed regions. To enumerate the list of the social benefits generated by the HSR, even if some number are associated to the description is as irrelevant as to show how expensive is the new technology. In economic terms, the net balance is what really matters, and this net results cannot be obtained without due consideration of the case base, compared with different `projects´ available for the solution of the `transport problem´ under evaluation. HSR is one alternative whose net benefit has to be compared with those resulting from other actions as the construction or upgrading of a conventional railway line, the construction of new airports or road capacity, or the introduction of congestion pricing, alone or combined with different investment plans.

#### No competition—Chinese high speed rail proves that the industries cooperate

**Wen author for the China Daily 4/24/12** (Wang. 4.24.2012, Writer for Chinadaily.com, China Daily, “Airlines link up with high-speed rail services,” <http://www.chinadaily.com.cn/bizchina/2012-04/24/content_15124568.htm>, Accessed 7/2/12, THW)

After two years of competing with high-speed rail lines, Chinese airlines are trying to find a mutually beneficial solution for both sides. On Monday, Hainan Airlines Co Ltd launched a joint operating program with Yuehai Railway Co Ltd, which runs the high-speed rail between Haikou and Sanya in Hainan province. Passengers can buy high-speed rail tickets from Haikou to Sanya when booking tickets on any Hainan Airlines flight to Haikou. The rail fares will be the same as those offered directly by railways. The airline will eventually sell tickets to other stops on the high-speed rail route. Hainan Airlines is not the only carrier with such a program. China Eastern Airlines Co Ltd will start to sell high-speed rail tickets at the end of this month. Tickets in either direction will be offered between Shanghai and four other cities - Suzhou, Wuxi, Changzhou and Ningbo. Ticket sales for high-speed rail lines will expand gradually within the main cities of Anhui, Jiangsu and Zhejiang provinces and Shanghai, which are under the jurisdiction of the Shanghai Railway Bureau, said Shen Xiaosheng, deputy director of the carrier's publicity department. He said fares will fluctuate, but joint tickets will cost less than the total air and rail fares if sold separately. China's high-speed rail service has been operating for two years and has had a broad, adverse effect on airlines' domestic business. Areas that are getting high-speed rail service are also the most profitable for airlines. All three major State-owned airlines cited high-speed rail service as a factor affecting revenue in their financial reports. Joint ticketing for airlines and high-speed rail lines could be a way for air carriers to profit from China's high-speed rail system, analysts said. "High-speed rail services heavily affect the business of flights of less than 500 kilometers," said Yuan Huifang, deputy general manager of marketing and sales at Hainan Airlines. "But we want to find a way to cooperate with rail systems." Yuan said joint ticketing can help both sides get more passengers.

### Turn – Intermodal

**High speed rail solves the disad – it’s efficient, solves the economy, warming, and is key to Intermodal Transportation**

**Addison, Author of Save Gas, Save the Planet, 9**

(John Addison, author of Save Gas, Save the Planet. Millions are spending less on gasoline, helping our country become energy secure, and reducing emissions, B.S. in Economics from the University of California at Irvine, where he graduated with honors and published research, 4/8/9, “High-Speed Rail Unlocks Intermodal Potential,” <http://www.cleantechblog.com/2009/04/high-speed-rail-unlocks-intermodal.html>, Accessed 7/5/12, THW)

By John Addison. Intermodal solutions allow people to effectively navigate major cities such as New York, Washington D.C., Paris, Madrid, and Tokyo. Subway and light-rail are especially effective, but expensive to build. As cities grow, change, and morph, not every potential route can be served with subway and light-rail. Bus rapid transit is a cost effective way to duplicate some of the benefits of light-rail, at a fraction of the capital expenditure. Buses, taxis, car sharing, bicycling, and walking are all parts of the solution. For many, cars are their preferred way to get around, yet if all transportation were cars then cities would be frozen in gridlock. High-speed rail integrates all these systems together and moves people from city to city at high-speed. When the distance is only a few hundred miles, high-speed rail coupled with city transit beats airplane and car every time. Now an 800 mile high-speed rail network is being started in California. Because it depends on local and public-private partnership funding, as well as state and federal funding, it will be built in sections. First online are likely to be areas that are currently overwhelmed with passenger vehicles crawling on freeways that should be renamed “slowways.” Likely to be among the first in service are the Orange County – Los Angeles section and the San Jose – San Francisco section. San Jose provides an example of current transportation problems as well as the future promise of high-speed rail integrated with intermodal solutions. Currently, during rush hour, cars crawl from all directions into San Jose, the self-proclaimed capital of Silicon Valley. Vehicles overload some of the nation’s busiest highways – 680, 880, 101, 280, 87, and 17. Commuters to and from San Jose have a number of options. Many require multiple transit agencies and added time to reach their destination. Caltrain services cities from San Francisco to San Jose, at times taking only an hour, at other times being less frequent and taking much longer. Several transit agencies have special commuter shuttles including AC Transit and Santa Cruz Metro. Major San Jose employers promote carpool and van pool commute programs. Shuttle buses run to the nearby airport. Santa Clara Valley Transit Authority’s (VTA) light-rail and buses effectively cover major parts of the city and connect to other systems. A variety of private bus, shuttle, car sharing, taxi, and other services all help. A network of bicycle trails and paths helps some enjoy their commute and stay in shape. A central hub for VTA, Caltrain, and Amtrak is the Diridon Station in San Jose, named after Rod Diridon who provided leadership for the modern transportation system in the greater area as six-time chairperson of the Santa Clara County Board of Supervisors and Transit Board. He has also been chair of the American Public Transit Association; he is the Executive Director of the Mineta Transportation Institute and Chair Emeritus of the California High-Speed Rail Authority (CAHSR). When I met with Rod Diridon last month he was optimistic about CAHSR breaking ground within two years, and carrying a high volume of riders on at least one segment within ten years. The reasons for success are compelling: high-speed rail is less expensive than freeway expansion, less expensive than airport expansion, secured voter approval during a severe recession, will create up to 400,000 new jobs, integrates all of California’s major transit systems, reduces petroleum use, and helps prevent increased climate change damage. Mr. Diridon feels that support is also strong, because each year of delay could add millions to the ultimate cost of the 800 mile system. In ten years, the Diridon Station is likely to see high volumes of travelers as high-speed rail shuttles people to and from San Francisco in 30 minutes. The CAHSR system will share the corridor currently in place for Caltrain. The station will allow passengers to board Amtrak and continue on to places like Los Angeles and Sacramento. Eventually, the high-speed rail will continue to those destinations, as all right-of-way and not-in-my-backyard (NIMBY) issues are resolved.

In ten years, increased VTA light-rail traffic will flow through the system as San Jose continues to grow. VTA Transportation Planner Jason Tyree described how light-rail will be supplemented with advanced bus-rapid transit that will rapidly move people with modern features such as level boarding, automated fare handling, signal prioritization, and potentially dedicated lane sections. The 60-foot buses will be hybrid diesel. People from the East Bay area may connect to the station via an extension to BART. Feeding off BART will be AC Transit’s ultramodern buses including its expanded fleet of hydrogen fuel cell buses. The Diridon Station ten-years from now could well have zero-emission electric bus shuttles from the nearby airport or even a more advanced people-mover service. Preferred car parking at the station is likely to be for electric and plug-in hybrid vehicles. San Jose, home to advanced vehicle and technology companies like Tesla, is committed to an extensive city-wide vehicle charging infrastructure. Although many electric vehicles are criticized for only having less than 100 mile in range per battery charge, such range is good for several days when combined with effective public transportation systems. Another way to cover the last miles to and from home and work is the good old bicycle. Bicycle boarding will be permitted on high-speed rail and the other public transportation systems. As cities are connected with high-speed rail, similar multimodal systems will also be connected in San Francisco, Los Angeles, Orange County, San Diego, Sacramento, and other major cities in this state of 40 million people; soon to be 50 million people. The new high-speed rail and the light-rail transit systems use electricity not petroleum. Electric rail is many times more efficient than diesel engine drive systems. In ten years, by law 33 percent of the electricity will be from renewable sources such as wind, solar, and geothermal. In 20 years, especially with the benefit of California’s new cap-and-trade of greenhouse gases, renewable energy is likely to be less expensive than natural gas and nuclear, with coal already being phased out in California. In other words, the high growth part of California transportation is likely to be zero-emission providing significant relief in emissions and energy security. Combining improved multimodal transportation with high-speed rail with renewable energy is bringing climate solutions just in time. California’s busy Highway 101, which stretches over 800 miles and which carries millions daily, will find major sections under water if the sea rises only 16 inches. As leading delegates from 175 nations now meet to discuss climate solutions scientist agree that global warming is accelerating and the arctic ice cap is disappearing. The multimodal transportation that serves millions of Americans is experiencing record use and provides the foundation for a more promising future.

**Intermodal transportation is key to airports**

**The Port Authority of New York & New Jersey 11**

(The Port Authority of New York & New Jersey, government agency, date last modified 12/30/11, “Intermodal Connections”, http://www.panynj.gov/air-cargo/intermodal-connections.html, Accessed 7/5/12, THW)

Intermodal Connections Our airports are integrated with a massive logistics and distribution system that provides efficient coordination between wings and wheels. Your cargo will move from air to surface transit smoothly, and -- with 3,500 domestic and international movements daily at John F. Kennedy International Airport (JFK), Newark Liberty International Airport (EWR) and LaGuardia Airport (LGA) -- your cargo will move from its origin to its final destination in a matter of hours. Surface Transit Network Through the region's convenient surface access network, you can easily reach: Other airports in the region for continuing flight connections. 18 million consumers in the immediate area. A vast network of highways and rail connecting you to every marketplace in North America. Stoplight-free highway connections to Chicago, Washington, D.C., Dallas, and even Montreal.

## Impact Answers

### AT – Air Power Impact

**Airports aren’t the same as airpower – the trade-off DA doesn’t apply to Airpower**

**Meilinger, US Air Force Advanced Airpower Studies School, 96**

(Colonel Phillip S. Meilinger, USAF, School of Advanced Airpower Studies, Maxwell AFB, Spring 1996, “Ten Propositions Regarding Airpower” <http://www.airpower.au.af.mil/airchronicles/cc/meil.html>, Accessed 7/5/12, THW)

A collection of airplanes does not equal airpower, and almost all theorists have realized this. As early as 1921 Mitchell wrote about the importance of a strong civil aviation industry, the role of government in building that industry, and of the importance of instilling an "airmindedness" in the people.53 His later writings made these points even more emphatically. Similar sentiments were echoed by Seversky and most recently by air leaders who spoke of the United States--the inventor of the airplane--as an "aerospace nation."54The vast size of the United States and the need to connect the east and west coasts, and indeed Alaska and Hawaii, demanded a rapid, reliable and cost-effective method of transportation. The development of various airline companies--still the largest and most financially powerful in the world--were a direct result of American geography and the need it engendered.

### AT – Free Trade Impact – Interdependence Solves

#### Other factors check back against war – trade isn’t critical

Streeten, Boston University, Professor of Economics, 1

(Paul, June 2001, International Monetary Fund, “Integration, Interdependence, and Globalization,” <http://www.imf.org/external/pubs/ft/fandd/2001/06/streeten.htm/>, accessed 7-3-12, THW)

Trade is, of course, only one, and not the most important, of many manifestations of economic interdependence. Others are the flow of factors of production—capital, technology, enterprise, and various types of labor—across frontiers and the exchange of assets, the acquisition of legal rights, and the international flows of information and knowledge. The global flow of foreign exchange has reached the incredible figure of $2 trillion per day, 98 percent of which is speculative. The multinational corporation has become an important agent of technological innovation and technology transfer. In 1995, the sales of multinationals amounted to $7 trillion, with these companies' sales outside their home countries growing 20-30 percent faster than exports.

# Auto Trade-Off DA

## Auto Industry – 1NC Shell

#### A. Uniqueness – Auto industry is growing – improving

CNBC, 4-3-12

(4-3-12, CNBC, “Auto Industry Shows Signs of Recovery as Car Sales Surge,” <http://finance.yahoo.com/news/car-sales-show-strong-growth-131454900.html>, accessed 7-3-12, LH)

U.S. auto sales continued at a robust pace in March, boosted by consumers with more confidence in a recovering economy who want to buy fuel-efficient cars and trucks in the face of rising gasoline prices.

Ford Motor had the best March for new-vehicle sales in the U.S. in five years, and AutoNation raised its forecast for sales for the whole year, in what may be a strong sign of recovery for the auto industry.

Ford (NYSE:[F](http://finance.yahoo.com/q?s=f) - [News](http://finance.yahoo.com/q/h?s=f)) Americas President Mark Fileds told CNBC on Tuesday that the sales performance was due to pent-up demand, mild weather and demand for fuel-efficient cars.

General Motors' (NYSE: [GM](http://finance.yahoo.com/q?s=gm) - [News](http://finance.yahoo.com/q/h?s=gm)) monthly sales rose 11.8 percent in March, less than the 20.6 percent rise that had been expected.

AutoNation (NYSE: [AN](http://finance.yahoo.com/q?s=an) - [News](http://finance.yahoo.com/q/h?s=an)) announced that March retail new vehicle unit sales increased 15 percent compared with the same month of last year and that sales in the first quarter increased 13 percent from the first quarter of 2011.

The results were so good, CEO Mike Jackson told CNBC, that the dealer raised its sales forecast for the whole year.

#### B. Link

[Insert Link to Plan]

#### C. Impact – Economy

#### 1. Auto industry is key to the U.S. economy

Hirsch, Los Angeles Times, Auto Industry Writer, 11

(Jerry, 8-25-11, Los Angeles Times, “Carmakers’ rebound is driving jobs in U.S.,” <http://articles.latimes.com/2011/aug/25/business/la-fi-autos-economy-20110825>, accessed 7-2-12, LH)

Taxpayers bailed out much of the U.S. auto industry. Now the carmakers might be what saves the nation's economy from falling back into recession.

After a massive restructuring and several high-profile bankruptcies, a leaner, more aggressive auto industry is making a comeback, hiring workers and ramping up manufacturing plants. From a trough two years ago, Ford Motor Co., General Motors Co., Chrysler Group and other auto companies have added almost 90,000 manufacturing jobs, a 14% increase, according to federal employment data.

Job growth in Michigan, which was devastated by the downturn, is even more robust. That's why Michigan's jobless rate stood at 10.9% in July, well below the 12% rate of California.

And it's not just the Big Three American manufacturers that are thriving. Nissan, VW and other foreign-based firms are expanding in the United States, putting billions of dollars into building and refurbishing plants. Start-ups Tesla Motors in Palo Alto, Fisker Automotive in Anaheim and Coda Automotive in L.A. are hiring and spending hundreds of millions of dollars designing and launching electric and hybrid vehicles.

Dealers are having a banner year, making more money per sale than they have in years and hiring back some workers shed during the recession.

"I have been adding dozens of employees for sales and sales support," said Mike Bowsher, who owns Chevrolet and Buick dealerships in Atlanta; Nashville, Tenn.; and Orlando, Fla. "The economy is crazy, but our retail business is still growing and getting better."

The Commerce Department said Wednesday that orders for autos and auto parts jumped 11.5% in July, the most in eight years. That followed an earlier government report on industrial production that showed the auto industry was the strongest segment of the manufacturing economy last month.

This kind of expansion is important to the economy. Including factories, suppliers and dealers, the U.S. auto industry employs about 1.7 million workers and supports an additional 6.3 million private-sector jobs, according to the Center for Automotive Research in Ann Arbor, Mich. The center said those positions represent more than $500 billion in annual compensation and more than $70 billion in personal tax revenue.

"Autos are certainly picking up. As we get into next year, this all depends on the state of the consumer," said Gary Schlossberg, senior economist Wells Capital Management.

Auto sales peaked at about 17 million in 2000 and held near that level until 2007 before crashing to just 10.4 million two years later. They were heading back into the 13-million range — helped by a wave of new models, low interest rates and improving consumer confidence — only to be upended by the Japanese earthquake in March.

Shutdowns at Japanese-owned factories in Japan and the United States created inventory shortages that led to sharply higher car prices, lower demand and hundreds of thousands of lost sales for dealers. But with those disruptions now in the rearview mirror, the industry is looking for sales to improve over the rest of the year.

The health of the U.S. economy is so dependent on autos that economists such as UCLA's David Shulman are watching car sales to assess whether the nation's recovery will accelerate or stall.

"If you see a 13-million-unit sales rate in the fourth quarter, that would help a lot," said Shulman, senior economist at the UCLA Anderson Forecast. "It would be very hard to see how the U.S. would go into recession with cars selling at that rate."

#### 2. U.S. economy key to the global economy

Weisman, Associated Press, 6/4/12

(Paul, 6-4-12, Business Week, “Global economy at risk as US, Europe and Asia slow”, http://www.businessweek.com/ap/2012-06/D9V6BG0G0.htm, accessed 6/27/12, MLF)

The global economy's foundations are weakening, one by one. Already hobbled by Europe's debt crisis, the world now risks being hurt by slowdowns in its economic powerhouses. The U.S. economy, the world's largest, had a third straight month of feeble job growth in May. High-flying economies in China, India and Brazil are slowing, too. Fears of a global economic downturn have sent investors rushing toward the safest possible investments: U.S. and German government bonds. As a result, the interest rate on the 10-year U.S. Treasury note has hit a record-low 1.46 percent. The rate on the German 10-year bond is even lower: 1.17 percent. "Treasurys are at 1.46 because people are freaking out," says Mark Vitner, senior economist at Wells Fargo Economics. The gravest fear is Europe. The most urgent threat is that in mid-June, Greek voters will reject the terms of a $170 billion bailout -- which called for painful budget cuts -- and abandon the euro. The move could ignite economic and financial chaos as Greek debts shift from denominations in euros to Greek drachmas of uncertain value. Yet the global economy's troubles go well beyond Greece. Here's a look at the global economy's vital signs: -- UNITED STATES American employers added just 69,000 jobs in May. Since averaging a healthy 252,000 a month from December through February, job growth has slowed to a lackluster average of 96,000 a month. On Friday, after the government issued the May jobs report, the Dow Jones industrial average sank 275 points. It was the Dow's biggest loss since November, and it's now down 0.8 percent for the year. The dismal news suggested that the U.S. economy is enduring a midyear slump just as in 2010 and 2011. Unemployment rose to 8.2 percent from 8.1 percent in May as 642,000 more Americans poured into the work force, and only 422,000 more people got jobs. The jobs report came out a day after the government said the U.S. economy grew at just a 1.9 percent annual rate in the first three months of 2012. That's a meager pace nearly three years after the recession officially ended in June 2009. And it's too slow to generate many jobs or to lower the unemployment rate. In good economic times, the rate would be below 6 percent. Many U.S. companies are finding it more efficient to invest in machinery, not people. "We're not hiring, and we're not replacing" workers who leave, says Joe Glenn, who runs Glenn Metalcraft in Princeton, Minn. His sales jumped 40 percent last year. Yet Glenn's shop has kept employment flat at about 35 workers. He's added more computer-controlled metalworking machines and robots to load the raw material into them. "We're producing as much as we were with a lot less manpower," Glenn says. "And I don't foresee that those jobs are going to come back." Other companies are reluctant to hire until they feel more confident that their customer demand will keep growing. Adding to their uncertainty are Europe's troubles and America's dysfunctional politics. For now, some key sectors of the U.S. economy remain positive. Americans are buying more homes, suggesting that the housing market is on the mend. U.S. builders have increased their spending on home and commercial construction. Auto sales just posted their best May since 2008. Manufacturing activity continues to grow, and so does consumer spending, which drives about 70 percent of the economy. Borrowing rates for consumers and businesses have never been lower. Tame inflation has given the Federal Reserve leeway to keep interest rates low. And gasoline prices have been sinking. The national average is now $3.61, and experts predict further drops in coming weeks. Still, unless Congress and the White House reach an agreement by year's end, federal taxes will jump and deep spending cuts will kick in. Should that happen, the Congressional Budget Office says, the economy would likely fall into another recession. Given the size of the U.S. economy, further weaknesses could worsen the slowdowns in European and Asian countries that depend on sales to American consumers. -- EUROPE Unemployment in the 17 countries that use the euro is already at 11 percent, the European Union's Eurostat office reported Friday. It's the highest rate since the euro was introduced in 1999. European countries have been struggling with their debt crisis for three years. Three nations -- Greece, Ireland and Portugal -- have already required bailouts because of unsustainable levels of debt. Austerity has been the main prescription for the crisis. But spending cuts and tax hikes are causing economies to shrink across the eurozone. In a blunt warning, European Central Bank chief Mario Draghi last week called the euro currency union "unsustainable" without stronger political and financial ties among eurozone countries. The fear is that Greece will drop the euro, and other weak countries, such as Spain and Portugal, will be forced to follow. Financial chaos could rage across Europe. Spain is facing punishing borrowing costs on bond markets because investors fear it won't be able to pay its debts. Prime Minister Mariano Rajoy declared Saturday that his government will stick with harsh austerity measures as long as necessary. But Spain's unemployment is already 24.4 percent. For those under age 25, unemployment is 51.5 percent. Businesses are being crushed. "This shop has been here for close to 100 years, and I've worked here for 48 years," says Manuel Cabrejas, a salesman at a cushion store in Madrid whose shop windows were covered in signs saying, "Closing down sale, big discounts, everything must go." "For the last two years, we have only just been covering running costs," Cabrejas said. "It's time to let go." -- ASIA AND SOUTH AMERICA Since the global recession ended in 2009, the world economy has been fueled by rising powers in the developing world led by China, India and Brazil. Now, all three are running into trouble. China's manufacturing weakened in May, according to surveys out Friday. Factory output was the weakest in three months. Some economists say China's economic growth will fall to an 8 percent rate in the April-June quarter. That's high by Western standards, but it would be the weakest growth for China in nearly three years. In response, China is rolling out an economic stimulus program. Having rebounded strongly from the recession of 2007-2009, China's economy grew a sizzling 10.4 percent in 2010 and 9.2 percent in 2011. For the past two years, it's helped drive global growth. Australia and other Asian countries have come to rely on Chinese markets for their exports. India is suffering an even sharper slowdown. Its economic growth slowed to a 5.3 percent annual rate in the January-March quarter, the lowest in nine years. Output from India's factories has declined. Its consumers have seen inflation -- which has averaged 9.2 percent a year since the start of 2010 -- devour their wages. "It's beyond anything that we would have imagined," said Samiran Chakraborty, head of research at Standard Chartered in Mumbai. "Real wages are falling ... The consumption slowdown along with the investment slowdown has been a double-whammy for the GDP number." As recently as last year, Indian politicians were claiming their economy could rival China's and surge into double-digit growth, lifting hundreds of millions out of poverty in the process. Instead, India is mired in a deepening crisis of confidence. Asia's third-largest economy is widely regarded as performing below its potential. Indians are losing hope that their country's fractious political system will deliver the policies that might unlock a rebound -- investments in roads, ports and other projects and lighter regulations to attract more foreign investment. One encouraging corner of Asia has been Japan's economy, the world's third largest. It grew at an annual rate of 4.1 percent in the first quarter of 2012 as it recovered from last year's earthquake and tsunami. But factors that could crimp expansion, such as weaker European demand for Japanese exports, have raised fears that Japan's growth will slow or even stall. In Brazil, the economy practically stalled in the first quarter of 2012. It grew at just a 0.2 percent annual rate from the final three months of 2011, the government said Friday. That was below expectations of 0.5 percent growth. Flooding punished farmers. But Brazilian officials, like analysts in China, also pointed to another culprit, one that shows how problems in one part of the world cause problems in another: The ongoing trouble in Europe is taking a toll on exports. -- THE MIDDLE EAST The region's trade is being hurt by the weakening global economy, particularly in Europe. The United Arab Emirates' top economic official said Monday that the Gulf federation's economy will likely grow only about 3 percent this year amid a drop in oil prices. That would represent a slowdown from 4.2 percent growth in 2011. The seven-state UAE federation is the largest Arab economy after Saudi Arabia. The United Arab Emirates said it's less optimistic about growth because of the oil exporter's close links to the slowing world economy.

#### 3. Economic collapse causes multiple worldwide nuclear wars

**Kemp, President’s national security assistant, 10**

[Geoffrey Kemp, Director of Regional Strategic Programs at The Nixon Center, served in the White House under Ronald Reagan, special assistant to the president for national security affairs and senior director for Near East and South Asian affairs on the National Security Council Staff, Former Director, Middle East Arms Control Project at the Carnegie Endowment for International Peace, 2010, Brookings Institution Press, “The East Moves West: India, China, and Asia’s Growing Presence in the Middle East,” p. 233-4, JF]

The second scenario, called Mayhem and Chaos, is the opposite of the first scenario; everything that can go wrong does go wrong. **The world economic situation weakens rather than strengthens**, and I**ndia, China, and Japan suffer a major reduction in their growth rates**, further **weakening the global economy**. As a result, **energy demand falls and the price of fossil fuels plummets, leading to a financial crisis for the energy-producing states, which are forced to cut back dramatically on expansion programs and social welfare. That** in turn **leads to political unrest: and nurtures** different **radical groups, including, but not limited to, Islamic extremists.** The **internal stability of** some **countries is challenged**, and **there are more “failed states**.” Most serious is **the collapse of the democratic government in Pakistan and its takeover by Muslim extremists, who then take possession of a large number of nuclear weapons. The danger of war between India and Pakistan increases significantly. Iran**, always worried about an extremist Pakistan, expands and **weaponizes its nuclear program. That** further **enhances nuclear proliferation in the Middle East, with Saudi Arabia, Turkey, and Egypt joining Israel and Iran as nuclear states**. Under these circumstances, **the potential for nuclear terrorism increases, and the possibility of a nuclear terrorist attack in either the Western world or in the oil-producing states may lead to a further devastating collapse of the world economic market, with a tsunami-like impact on stability. In this scenario, major disruptions can be expected, with dire consequences for two-thirds of the planet’s population.**

## Uniqueness

### Auto Industry Growing – Sales

#### **U.S. auto industry has experienced consistent growth**

Mattson, Global Post, 7-3-12

(Jennifer, 1-9-12, Global Post, “US auto industry expects profits in 2012,” <http://www.globalpost.com/dispatch/news/regions/americas/united-states/120109/us-auto-industry-expects-profits-2012>, accessed 7-3-12, LH)

Auto industry executives and analysts say 2012 will be a good year for Detroit. They expect auto sales to grow from 4 to 9 percent, the third consecutive annual gain, according to Reuters.

At this week’s Detroit auto show, industry experts are seeing a US market that has relatively stabilized compared with just three years ago, when it hit bottom, but could see growth affected by Europe’s debt crisis and China’s slowdown.

#### **Car sales hitting a five year peak – industry healthy**

Klayman, Reuters, Auto industry correspondent, 6-29-12

(Ben, 6-29-12, Reuters, “June U.S. new-car sales seen highest in five years,” <http://www.reuters.com/article/2012/06/29/us-usa-autosales-idUSBRE85S15S20120629>, accessed 7-3-12, LH)

(Reuters) - The deteriorating European markets have led auto industry executives to worry about possible contagion spreading across the Atlantic, but June new-car sales in the United States are expected to hit a five-year peak for that particular month.

Auto sales, which offer an early snapshot of consumer demand, have been one of the bright spots in the U.S. economy for several months until May results came in short of expectations and raised concerns about the sector's recovery.

Analysts and industry officials, however, said there are just too many old cars that need to be replaced, which will drive consumers into dealers' showrooms. The average age of cars on the road is an all-time-high 11 years.

"The most interesting thing is the ongoing battle between pent-up demand and concern over financial issues," said Karl Brauer, chief executive of research firm Total Car Score. "There is, by no means, clear sailing ahead on the financial issues, but people are getting really tired of driving their old cars."

Economists polled by Thomson Reuters see the annual selling rate for new cars in the U.S. market in June finishing at 13.9 million vehicles. That would mark the second month in a row below the 14 million rate, but would exceed last month's 13.7 million.

Opinions vary, however, as TrueCar.com expects a sales rate of 13.6 million, while General Motors Co ([GM.N](http://www.reuters.com/finance/stocks/overview?symbol=GM.N)) CEO Dan Akerson said on Thursday the market was "surprisingly strong" and he saw it finishing between 14 million and 14.2 million.

J.D. Power and LMC Automotive, and Edmunds.com see sales rising 20 percent from last year to about 1.27 million new cars and trucks, while TrueCar sees an increase of 18 percent. That would be the highest level since 1.46 million were sold in 2007, just before the U.S. economy slipped into a recession that forced GM and Chrysler into bankruptcy.

Some of the projected increase will be due to a recovery by Toyota Motor Corp ([7203.T](http://www.reuters.com/finance/stocks/overview?symbol=7203.T)) and Honda Motor Co ([7267.T](http://www.reuters.com/finance/stocks/overview?symbol=7267.T)) from the impact of last year's earthquake in [Japan](http://www.reuters.com/places/japan) that hurt U.S. supplies.

Major automakers including GM, Ford Motor Co ([F.N](http://www.reuters.com/finance/stocks/overview?symbol=F.N)) and Toyota will report June U.S. new-car sales on Tuesday.

The downward spiral of the European market has raised concerns, however. "I'm a little bit worried about the second half because we see softness in Europe," Akerson said Thursday at an event in Chicago. However, his positive forecast for June U.S. sales was based on the pent-up demand in the market.

Ford echoed Akerson's concerns on Thursday when it warned that second-quarter losses from operations outside North America could triple the $190 million first-quarter loss, hurt mainly by weakness in Europe. The No. 2 U.S. automaker still sees an overall profit, however, as North America remains strong.

"The good news is we still have growth in the economy. It is moderate," Ford North American chief Mark Fields said earlier in the week. "Some of the economic figures in the last six weeks are a little bit contradictory. The housing starts and permits actually were up. At the same time, we've seen consumer confidence come off its high earlier this year."

Ford expects a June sales pace in the high 13 million-vehicle range, he said.

"The (annual sales rate) does appear to be slowing down from the 14.6 million level in the first quarter, which we attribute to some demand pull forward into the first quarter with the warm winter and an increasingly cautious consumer given some signs of a slowing U.S. economy," RBC Capital Markets analyst Joseph Spak said in a research note.

Spak expects a June sales rate of 13.9 million vehicles, but said lower gasoline prices, easier access to credit and newly launched cars will bolster second-half demand. He added there are more downside risks to his industry estimate at this time.

Analysts expect sales in June to decline from May, but Kelley Blue Book said such a decrease is what normally occurs this time of year. Since 2007, the daily selling rate has dropped between 3 percent and 10 percent from May to June, putting the company's projected 8 percent decline within that trend.

Despite the expected second straight month below a 14 million sales rate, analysts are not backing off full-year U.S. sales projections yet.

"Despite the relative slowdown in the last few weeks, the first-half sales results this year indicate a relatively healthy car industry; perhaps the brightest spot in an otherwise struggling U.S. economy," said TrueCar analyst Jesse Toprak. "We expect second-half of 2012 to average around 14.5 million units."

J.D. Power and LMC still expect 2012 sales of 14.5 million new cars and trucks.

"We're seeing healthy retail sales growth as we head into the summer selling season and as automakers change over to the 2013 model-year vehicles," said J.D. Power analyst John Humphrey. "All indicators point toward an industry that continues to get healthy."

#### **Auto industry is growing – sales are the best in 5 years**

CNBC, 4-3-12

(4-3-12, CNBC, “Auto Industry Shows Signs of Recovery as Car Sales Surge,” <http://finance.yahoo.com/news/car-sales-show-strong-growth-131454900.html>, accessed 7-3-12, LH)

U.S. auto sales continued at a robust pace in March, boosted by consumers with more confidence in a recovering economy who want to buy fuel-efficient cars and trucks in the face of rising gasoline prices.

Ford Motor had the best March for new-vehicle sales in the U.S. in five years, and AutoNation raised its forecast for sales for the whole year, in what may be a strong sign of recovery for the auto industry.

Ford (NYSE:[F](http://finance.yahoo.com/q?s=f) - [News](http://finance.yahoo.com/q/h?s=f)) Americas President Mark Fileds told CNBC on Tuesday that the sales performance was due to pent-up demand, mild weather and demand for fuel-efficient cars.

General Motors' (NYSE: [GM](http://finance.yahoo.com/q?s=gm) - [News](http://finance.yahoo.com/q/h?s=gm)) monthly sales rose 11.8 percent in March, less than the 20.6 percent rise that had been expected.

AutoNation (NYSE: [AN](http://finance.yahoo.com/q?s=an) - [News](http://finance.yahoo.com/q/h?s=an)) announced that March retail new vehicle unit sales increased 15 percent compared with the same month of last year and that sales in the first quarter increased 13 percent from the first quarter of 2011.

The results were so good, CEO Mike Jackson told CNBC, that the dealer raised its sales forecast for the whole year.

### **Auto Industry Growing – Job Creation**

#### **Auto industry growing- job creation**

Bryson, U.S. Department of Commerce Secretary, 7-3-12

(John, 4-19-12, House Energy and Commerce Committee, Hearing of the Subcommittee on Commerce, Manufacturing, and Trade: “Where the Jobs Are: Can American Manufacturing Thrive Again?,” <http://republicans.energycommerce.house.gov/Media/file/Hearings/CMT/20120419/HHRG-112-IF17-WState-JBryson-20120419.pdf>, p. 2-3, accessed 7-3-12, LH)

The President made the difficult decision to offer financial support when there were no willing private sector investors and in return required hard sacrifices by all stakeholders as part of a corporate restructuring. Today, the auto industry is coming back. Since Chrysler and GM emerged from bankruptcy in June 2009, the American auto industry has added more than 200,000 new jobs. GM is again the number one automaker in the world in terms of sales, Chrysler is the fastest growing major car company in the U.S., and Ford has committed to $16 billion in new investment and 12,000 jobs over the next several years.

### Auto Industry Growing – New Plants

#### **Auto industry expanding now – new plants**

LeBeau, CNBC, auto industry reporter, 3-16-12

(Phil, 3-16-12, CNBC, “Automakers Looking at Add Plants in US,” <http://www.cnbc.com/id/46759926>, accessed 7-3-12, LH)

Here's something few could have imagined two years ago: the Big 3 are once again looking at opening new plants.

Take a second to let that idea sink in.

It says volumes about how far the auto industry and America's economy have come. And yes, it's the kind of news that will stick in the craw of those workers and cities the Big 3 cut loose over the last two years.

So how close are Detroit's automakers to opening new assembly plants or expanding current ones to add capacity?

It won't happen this year and probably not until 2014. But to quote one auto executive, "This is a conversation we are starting to have because we have to be ready."

Big 3 executives will be careful to publicly play down expansion talk, but make no mistake, they see the need coming much faster than anyone expected.

During the recession/auto meltdown America's automakers closed 12 plants and stripped out 5.5 million vehicles of capacity. They right-sized an industry to be break-even with annual sales of 10 million vehicles and be near full capacity at close to 15 million in annual sales.

Well, after finishing last year with annual sales of 12.8 million vehicles, look at what's happened so far this year. The sales pace (thanks to pent-up demand and an improving economy) is well over 14 million. Many now believe the industry will finish the year with a sales pace of at least 14.5 million.

The Big 3 have responded to higher sales by ramping-up production, adding third shifts and scrambling to keep up with demand. Their engine plants are running full steam. In February, auto plants in the U.S. utilized 85% of their capacity.

In the world of manufacturing, that's practically full capacity.

## Links

### Generic – Transportation Options

#### More transportation choices reduces automobile use – studies prove

Sierra Club, grassroots environmental organization, 01

(Sierra Club, Sprawl Report 2001, "Public Transit vs. Highways: What Cities are Spending to Improve Our Health," http://www.sierraclub.org/sprawl/report01/transitvshighways.asp, accessed 7-8-12, CNM)

Giving people more transportation choices can dramatically lower automobile use, reducing air pollution and the accompanying effects on public health. In fact, according to a study done by the Centers for Disease Control and Prevention in Atlanta, providing more transportation choices during the 1996 Olympics reduced traffic by 22 percent, air pollution by 28 percent and asthma attacks by up to 42 percent.(35)

#### Smog studies prove

Sierra Club, grassroots environmental organization, 01

(Sierra Club, Sprawl Report 2001, "Public Transit vs. Highways: What Cities are Spending to Improve Our Health," http://www.sierraclub.org/sprawl/report01/transitvshighways.asp, accessed 7-8-12, CNM)

By comparing pollution from cars and trucks per person to transit spending per person, you'll notice a striking connection. New York state, for example, receives an "A" for its spending on public transit, and is the only state in this grading that spends more money on alternatives than on new roads. At the same time, as shown by the first grading, the New York City metropolitan area received the best grade of all the cities for the lowest amount of smog per person from cars and trucks. Oklahoma, where Oklahoma City had the most smog from cars and trucks per person, spends a paltry $5.80 per person on public transit to every $100 it spends on highway and road construction. This makes Oklahoma one of the lowest graded states in terms of spending on transportation choices vs. roads.

The fact that seven of the 12 cities with the best grades for lowest rates of smog per person from cars and trucks are located in five of the highest graded states for spending on clean transportation choices demonstrates the power of public transit as a tool in combating air pollution.

### Transportation Hubs Hurt the Auto Industry

#### Transportation hubs hurt the auto industry

Eisenstein, The Detroit Bureau, 6-28-12

(Paul A., The Detroit Bureau, "Shift to City Living Threatens Auto Industry," http://www.thedetroitbureau.com/2012/06/shift-to-city-living-threatens-auto-industry/, accessed 7-8-12, CNM)

But newly-released U.S. census data show that, for the first time in a century, cities are growing faster than surrounding suburbs. And that, tied to other demographic and psychographic trends could pose potentially serious challenges to automakers desperately seeking further growth.

The shift back to urban living is largely being led by the so-called Millennial generation, and research is finding that members of Gen-Y are also far less interested in owning or driving automobiles than those from previous generations who led the tract home migration.

“There’s a bigger focus on building residences near transportation hubs, such as a train or subway station, because fewer people want to travel by car for an hour and a half for work anymore,” Royal Shepard, an analyst with S&P Capital IQ in New York, who tracks the residential and commercial real estate market, told the Associated Press.

### Mass Transit

#### The link is reverse causal – empirics prove the auto industry booms during a lack of mass transit investments

Eisenstein, The Detroit Bureau, 6-28-12

(Paul A., The Detroit Bureau, "Shift to City Living Threatens Auto Industry," http://www.thedetroitbureau.com/2012/06/shift-to-city-living-threatens-auto-industry/, accessed 7-8-12, CNM)

A shift into urban centers offering mass transportation appears to also be playing a role. Most American cities began scaling back on rail and other mass transit systems as the auto industry began its ascendance but more and more urban centers, such as Seattle, are now adding rail and bus systems – while also expanding bike and pedestrian routes. Even New York City, home to the country’s most extensive mass transit system, is blocking out more areas where cars are banned.

#### **Mass transit trades off with the auto industry – 2008 proves**

Miami Herald, 8

(12-8-08, SoFlo, “Mass transit use is up 6.5% nationwide,” <http://www.soflo.fau.edu/media/article.aspx?articleID=574>, accessed 7-2-12, LH)

WASHINGTON -- The nation's public transportation systems saw the largest quarterly ridership increase in 25 years as more Americans shunned their automobiles even as gas prices began to ease, according to industry figures released Monday.

Subways, buses, commuter rail and light-rail systems saw a 6.5 percent jump in ridership from July to September, according to the Washington-based American Public Transportation Association.

During the same quarter, Americans drove 4.6 percent less on the nation's highways. The average price for a gallon of gas peaked at more than $4 in mid-July, then began falling.

''They may have tried public transportation to get away from high gas prices, but many have since found it works for them,'' association president William W. Millar said. ``I think this year has been a real turning point for the public's attitude toward public transportation.''

The real test, however, could be reflected in the coming months; gas prices recently plunged below $2 a gallon nationwide for the first time since 2005.

In South Florida, local transit providers reported similar results. All saw spikes in ridership during the third quarter as gas prices peaked at $4.16 per gallon.

Some of those gains have dissipated as gas prices have recently eased back to the $1.80 per gallon threshold.

''We definitely saw an increase over the summer,'' said Susy Guzman-Arean, acting director of strategic planning for Miami-Dade Transit, the nation's 12th-largest system. ``We're expecting the numbers to drop off now that gas prices are down. We're still up, but not as much as we were this summer.''

Miami-Dade is still calculating its final numbers for Metrobus, Metrorail and Metromover ridership in August and September.

But preliminary reports indicate that Miami-Dade Transit ridership was up 13.4 percent across all three modes in July over the previous year.

The gains tailed off considerably in August -- a 2.2 percent gain over the previous year -- but those numbers were affected by the calendar and Mother Nature.

There were only 21 weekdays this August, versus 23 in August 2007, and all transit agencies lost riders due to the threat of Tropical Storm Fay.

Miami-Dade Transit ridership was up 3.6 percent in September over the previous year.

The biggest gains were observed in July at Metrorail, which recorded a 20.2 percent increase in riders over the same month in 2007. Approximately 66,500 people board a Metrorail train on a typical weekday.

Metrobus posted a 12.4 percent spike in ridership in July over the previous year. Approximately 265,000 people board a Metrobus on a typical weekday.

At Tri-Rail, more than 15,119 people a day boarded a train in July, up 41.9 percent over the previous July, according to the South Florida Regional Transportation Authority.

Ridership tailed off slightly in August -- only up 19 percent over the previous year -- but those numbers would have been stronger if service had not been interrupted for two days by Fay.

In September, with the first full month of school in session, Tri-Rail daily ridership routinely exceeded the 16,000 mark -- a 39 percent improvement over the previous year.

''We have seen a slight decline since September,'' said Tri-Rail spokeswoman Bonnie Arnold. ``And I do attribute that to the fact that gas prices have dramatically dropped down here.''

Broward County Transit spokeswoman Phyllis Berry said the agency had originally been projecting a 6 percent decrease in riders -- a result of service cuts and a 25-cent fare increase that went into effect in September 2007.

An estimated 128,000 people board a Broward County Transit bus on a typical weekday.

But ridership was actually up 3.65 percent in July, and 3.5 percent in September. Ridership was down 10.5 percent in August -- a reflection of the losses due to Fay and the calendar, Berry said.

Nationwide, riders made 2.85 billion trips on public transportation during the third quarter, up from 2.67 billion trips a year ago. There have been gains in every quarter this year from 2007. Last year's 10.3 billion trips were the most on public transportation in 50 years.

Amtrak also is seeing growth, with ridership across the country up 11 percent from July to September, according to spokeswoman Karina Romero.

The gains come as more Americans stay off the roads. The Federal Highway Administration has reported 11 consecutive months of a decline in driving. Meanwhile, the U.S. auto industry is on the verge of collapse as vehicle sales plummet. Sales in September dropped below one million for the first time in 15 years and continued to decline in October and November.

### Passenger Rail

#### **Passenger rail hurts the auto industry**

Rutz, The Lima News, 9

(Heather, 3-17-09, The Lima News, “Jordon on backruptcy, bailouts,” <http://www.limaohio.com/news/jordan-35299-lima-recession.html>, accessed 7-2-12, LH)

In the current economy, high-speed rail supporters have a high burden of proof with Jordan, to show economic development benefits, a cost-benefit analysis and that it can sustain itself.

He distinguishes between passenger and freight rail, though supporters say the improvements will benefit the freight lines and the Ohio Freight Rail Association supports the state's plan.

Passenger rail could also hurt the auto industry, Jordan said.

"Here we are asking [automaker employees] to give their tax dollars to something that will directly compete with their industry," Jordan said.

#### **High speed rail attracts customers from the auto industry**

Dutzik, Frontier Group, Senior Policy Analyst, et al., 10

(Tony, Siena Kaplan, Frontier Group Analyst, Phineas Baxandall, Federal Tax and Budget Policy Analyst with U.S. PIRG, 2-9-10, Frontier Group, “The Right Track: Building a 21st Century High-Speed Rail System for America,” <http://americanhsra.org/whitepapers/uspirg.pdf>, p. 15-16, accessed 7-2-12, LH)

Passenger rail is a cleaner form of transportation than car or air travel, emitting less global warming pollution and less health-threatening air pollution. Building a highspeed rail network in the United States would attract passengers who otherwise would have taken cars or planes, reducing the country’s global warming emissions and cleaning up our air. Modernizing our tracks would also benefit freight trains, taking large trucks off of highways and adding to the environmental and health benefits of investment in rail.

#### Rail undercuts auto travel

Joint Transport Research Centre, 2009

[October, 2009, “Competitive Interaction between Airports, Airlines and High-Speed Rail”, OECD Report, <http://www.internationaltransportforum.org/jtrc/discussionpapers/DP200907.pdf>, p. 20]

The French situation was mentioned as one where capacity in aviation was a crucial factor in the assessment of high-speed rail projects. Some French TGV connections brought about a substantial shift from air to rail29, freeing up scarce capacity (valuable slots) in aviation30. This effect occurs irrespective of whether low-cost or other carriers might provide service between the cities linked by the high-speed rail connection. Furthermore, since high-speed rail uses separate facilities, it can also free up capacity for rail freight and for regional passenger transport. It was noted, however, that in many cases the main (expected) modal shift in response to a high-speed rail connection is from road to rail, not from air to rail.

### Freight Rail

#### Freight rail trades off with auto industry- takes cars off the road

Association of American Railroads, 11

(January 20 2011, Association of American Railroads, "AAR Highlights Freight Rail’s Role in Easing Highway Gridlock," <http://www.aar.org/NewsAndEvents/Press-Releases/2011/01/21-gridlock.aspx>, accessed 7-5-12, LH)

“Freight rail’s congestion curbing credentials are considerable: Today, one freight train can carry the load of more than 280 trucks, which is roughly equivalent to removing 1,100 cars from our congested highways. Thanks to constant efforts to improve fuel efficiency, a typical freight train can move a ton of goods 480 miles on a single gallon of fuel. That’s like driving from Washington, D.C. to Toledo, Ohio on just one gallon of gas.

#### Freight rail trades off with the auto industry - empirically

The Economist, 10

(7-22-10, The Economist, "High-speed railroading," http://www.economist.com/node/16636101, accessed 7-5-12, LH)

But the past ten years have seen another source of growth, as interstate highways have become clogged in places and have shown the effects of a lack of investment. Since one freight train can carry as much as 280 lorries can, railways can help to limit the rise in road congestion. Trucking companies such as J.B. Hunt have come to see the advantage of putting trailers on flat wagons for long-haul and using roads only for local pickup and delivery. This move was also spurred, according to Mr Phillips, by a shortage of lorry drivers. He says that tougher drink-driving rules and social changes have shrunk the numbers of “good ole boy” truckers inured to a life on the road. Most hauliers now suffer labour turnover of 100% a year.

## Economy

### Auto Industry Key to Economy

#### Auto industry is key to the U.S. economy

Kiley, AOL Autos, Editor-in-Chief, 11

(David, 5-11-11, AOL Autos, “Opinion: The Auto Industry Bailout- Still Debated But Worth Every Penny,” <http://autos.aol.com/article/auto-industry-bailout-worth-eve/>, accessed 7-5-12, LH)

4. Like it or not, the auto industry is critical to the U.S. economy. CAR estimated the loss of 3 million jobs over three years if GM and Chrysler were allowed to go belly-up, with only about 240,000 jobs being at the auto manufacturers themselves. The rest were the attendant industries that interconnect with autos. The loss of personal income by the end of 2011 would have been $400 billion by the end of 2011, and the costs to the U.S. Treasury would have been $156 billion, according to CAR.

#### **U.S. auto industry is key to the economy**

Hirsch, Los Angeles Times, Auto Industry Writer, 11

(Jerry, 8-25-11, Los Angeles Times, “Carmakers’ rebound is driving jobs in U.S.,” <http://articles.latimes.com/2011/aug/25/business/la-fi-autos-economy-20110825>, accessed 7-2-12, LH)

Taxpayers bailed out much of the U.S. auto industry. Now the carmakers might be what saves the nation's economy from falling back into recession.

After a massive restructuring and several high-profile bankruptcies, a leaner, more aggressive auto industry is making a comeback, hiring workers and ramping up manufacturing plants. From a trough two years ago, Ford Motor Co., General Motors Co., Chrysler Group and other auto companies have added almost 90,000 manufacturing jobs, a 14% increase, according to federal employment data.

Job growth in Michigan, which was devastated by the downturn, is even more robust. That's why Michigan's jobless rate stood at 10.9% in July, well below the 12% rate of California.

And it's not just the Big Three American manufacturers that are thriving. Nissan, VW and other foreign-based firms are expanding in the United States, putting billions of dollars into building and refurbishing plants. Start-ups Tesla Motors in Palo Alto, Fisker Automotive in Anaheim and Coda Automotive in L.A. are hiring and spending hundreds of millions of dollars designing and launching electric and hybrid vehicles.

Dealers are having a banner year, making more money per sale than they have in years and hiring back some workers shed during the recession.

"I have been adding dozens of employees for sales and sales support," said Mike Bowsher, who owns Chevrolet and Buick dealerships in Atlanta; Nashville, Tenn.; and Orlando, Fla. "The economy is crazy, but our retail business is still growing and getting better."

The Commerce Department said Wednesday that orders for autos and auto parts jumped 11.5% in July, the most in eight years. That followed an earlier government report on industrial production that showed the auto industry was the strongest segment of the manufacturing economy last month.

This kind of expansion is important to the economy. Including factories, suppliers and dealers, the U.S. auto industry employs about 1.7 million workers and supports an additional 6.3 million private-sector jobs, according to the Center for Automotive Research in Ann Arbor, Mich. The center said those positions represent more than $500 billion in annual compensation and more than $70 billion in personal tax revenue.

"Autos are certainly picking up. As we get into next year, this all depends on the state of the consumer," said Gary Schlossberg, senior economist Wells Capital Management.

Auto sales peaked at about 17 million in 2000 and held near that level until 2007 before crashing to just 10.4 million two years later. They were heading back into the 13-million range — helped by a wave of new models, low interest rates and improving consumer confidence — only to be upended by the Japanese earthquake in March.

Shutdowns at Japanese-owned factories in Japan and the United States created inventory shortages that led to sharply higher car prices, lower demand and hundreds of thousands of lost sales for dealers. But with those disruptions now in the rearview mirror, the industry is looking for sales to improve over the rest of the year.

The health of the U.S. economy is so dependent on autos that economists such as UCLA's David Shulman are watching car sales to assess whether the nation's recovery will accelerate or stall.

"If you see a 13-million-unit sales rate in the fourth quarter, that would help a lot," said Shulman, senior economist at the UCLA Anderson Forecast. "It would be very hard to see how the U.S. would go into recession with cars selling at that rate."

#### **Auto industry supports a healthy economy**

Zino, Detroit News Bureau, 10

(Ken, auto industry veteran with global experience, previous director of Public Affairs at Ford Motor Company, publisher of AutoImformed, 4-22-10, Detroit News Bureau, “U.S. Automobile Industry Makes $500 Billion Dollar Contribution to the Economy,” <http://www.thedetroitbureau.com/2010/04/u-s-automobile-industry-makes-500-billion-dollar-contribution-to-the-economy/>, accessed 7-2-12, LH)

The U.S. auto industry provides a substantial contribution to U.S. economic health, according to the latest study released this morning by the Sustainable Transportation and Communities group at the Center for Automotive Research (CAR).

The non-profit research organization looked at the economic and employment impact of automakers, parts suppliers, and dealerships in contributing to the economies of all 50 states.

The automotive industry spends $16 to $18 billion dollars a year on research and [product development](http://www.thedetroitbureau.com/2010/04/u-s-automobile-industry-makes-500-billion-dollar-contribution-to-the-economy/), half a trillion dollars on employee compensation, and is the major leader of the overall manufacturing contribution to the gross domestic product.

It is difficult to imagine manufacturing surviving in this country without the automotive Sector, said Kim Hill, director of the Sustainable Transportation and Communities group at CAR, and the study’s lead.

The industry’s impact is huge on a host of other sectors as diverse as raw materials, construction, machinery, legal, [computers](http://www.thedetroitbureau.com/2010/04/u-s-automobile-industry-makes-500-billion-dollar-contribution-to-the-economy/) and semiconductors, financial, advertising, health care and education. In this time of national introspection concerning the value of the U.S.-based auto industry, it is clear the value is quite high,” Hill said.

The study was written by Hill, Deb Menk, [project manager](http://www.thedetroitbureau.com/2010/04/u-s-automobile-industry-makes-500-billion-dollar-contribution-to-the-economy/), and Adam Cooper, research associate. The complete study is available at www.cargroup.org.

The CAR study results provide strong evidence of the deep vertical and horizontal integration of the U.S. auto industry with so much of the U.S. economy,” said Sean McAlinden, executive vice president of research and chief economist at CAR.

The study also illustrates the high productivity potential of the U.S. auto industry and the importance of its role in leading the U.S. economy in the current recovery. This study definitely proves that federal assistance to the industry last year will produce many benefits in jobs, income, and public revenues for years to come,” said McAlinden.

For the study, the authors assumed:

Vehicle manufacturers (OEM) directly employed 313,000 people

Includes manufacturing, research and development, headquarters, and all other operational activities

686,000 people were employed in the automotive parts sector

Includes a percentage employment from rubber, plastics, [batteries](http://www.thedetroitbureau.com/2010/04/u-s-automobile-industry-makes-500-billion-dollar-contribution-to-the-economy/), and other non-automotive sectors

737,000 people were employed in the dealer network selling and servicing new vehicles

1,736,000 people were employed in the entire industry

The study shows that these 1.7 million direct jobs contribute to an estimated

8 million total private sector jobs

More than $500 billion in annual compensation and

More than $70 billion in personal tax revenues

Therefore, the employment multiplier for OEM activities is 10, while the employment multiplier for the entire industry is 4.

#### Auto industry key to the economy – jobs, sales

Lentz, Toyota, President and CEO, 9

(Jim, 11-17-09, Vital Speeches of the Day, “Cars: Enriching Our Lives, Our Economy and Our Future,” Academic Search Complete, p. 76, accessed 7-6-12, LH)

Cars not only make an enormous impact on our personal lives, they make a huge impact on the economy. America’s auto industry is the engine that drives the economy.

No other single industry supports U.S. manufacturing as much or generates more retail sales or employment. Nearly 4% of the U.S. domestic product is auto related ... and auto suppliers operate in all 50 states to produce some of the 3,000 parts used in cars today.

And the auto industry is responsible for 1 out of every 10 U.S. jobs ... They’re good-paying jobs, with workers receiving $335 Billion per year in compensation. Let’s put that in perspective.

That’s more than the total market value of the world’s most profitable company ... Exxon Mobil. And that’s not all. Automakers and suppliers are among the largest purchasers of steel ... aluminum ... rubber ... textiles ... and computer chips in the world.

#### **Auto industry promotes economic prosperity**

Lentz, Toyota, President and CEO, 9

(Jim, 11-17-09, Vital Speeches of the Day, “Cars: Enriching Our Lives, Our Economy and Our Future,” Academic Search Complete, p. 77, accessed 7-6-12, LH)

So ... when you add it all up ... there are very few industries in this world that pack the economic punch and nontangible benefits the auto industry does.

And we aren’t the only nation to recognize that.

Great Britain ... Germany ... Italy ... and Japan ... all rose to economic prominence by fostering a strong automotive industry.

That’s why Brazil, Russia, India and China ... the socalled BRIC countries ... are plowing money into their fledgling auto industries. These nations know that the auto industry is a powerful economic driver that provides mobility for people and commerce AND creates long-term prosperity.

And it’s a smart bet.

A recent Booz & Company report notes that when per capita income rises in developing countries, rates of car ownership increase, thus improving personal income and stimulating further economic development.

### Economy – Job Creation

#### **The auto industry is the biggest internal link to the economy – creating jobs and growing faster than any other sector**

Durbin, Associated Press, Auto Writer, 11

(Dee-Ann, 7-6-11, MSNBC, “Auto industry, seeing new life, on hiring spree,” <http://www.msnbc.msn.com/id/43657765/ns/business-autos/t/auto-industry-seeing-new-life-hiring-spree/#.T-i5LuZOxJM>, accessed 7-1-12, LH)

Volkswagen opened a plant in Tennessee last month with 2,000 workers. Honda is hiring 1,000 in Indiana to meet demand for its best-selling Civic. General Motors is looking for 2,500 in Detroit to build the Chevy Volt.

Two years after the end of the Great Recession, the auto industry is hiring again — and much faster than the rest of the economy. As an employer, it's growing faster than airplane manufacturers, shipbuilders, health care providers and the federal government.

The hiring spree is even more remarkable because memories of the U.S. auto industry's near-death experience are fresh. In 2009, General Motors and Chrysler both got government bailouts and entered bankruptcy, and auto sales hit a 30-year low.

In June of that year, about 623,000 people were employed by the auto industry in the United States, the fewest since the early 1980s. Now the figure is almost 700,000, a 12 percent increase.

Sales are back up, too, and automakers are hiring by the thousands to meet increased demand.

"The buzz is incredible around here about what opportunity we're going to get if we can build a great product," says Ben Edwards, who went to work for Volkswagen in Chattanooga, Tenn., last year and is now a team leader on an assembly line that installs tires and seats.

Edwards was working as a general contractor until the housing market dried up. He says the pay at Volkswagen, which starts at $14.50 an hour, is fair and the benefits are generous.

Besides hiring 2,000 people itself, Volkswagen figures the plant, where it will make its new Passat, will create 9,000 spin-off jobs in the region, including 500 at auto-supplier plants that are springing up nearby.

Automakers are hiring again because car sales are rising. Americans bought 10.4 million cars and trucks in 2009 and 11.6 million in 2010. This year, they're on track to buy 13 million or more, and auto companies are adding shifts to meet the demand.

"Everybody got so lean and mean during the downturn that they're trying to rebuild staff," says Charles Chesbrough, a senior economist with IHS Automotive.

The auto industry's 12 percent increase in jobs compares with a 0.2 percent gain for the economy as a whole, excluding farming and adjusted for seasonal variation, since June 2009. The Labor Department reports Friday on jobs gained or lost last month.

In a normal economic recovery, improvement in the housing market leads the way by creating construction jobs. But home prices haven't stopped falling, and the construction industry has shed 8 percent of its workers since June 2009 — 474,000 jobs in all.

The gains in the auto industry have been small by comparison. But they do create positive ripple effects for the economy. The Center for Automotive Research estimates that every new auto manufacturing job leads to nine other jobs — from parts makers to restaurants that feed autoworkers.

The auto gains have been widespread, with the Midwest the biggest beneficiary. In Ohio alone, auto manufacturing jobs have risen 31 percent the past two years, while parts makers in Michigan have added nearly 20,000 jobs.

Parts jobs are also up 15 percent in Alabama, where workers make parts for Mercedes SUVs and Honda minivans, and in Kentucky, where the Chevrolet Corvette and Toyota Camry are made.

Before the turnaround, new auto jobs were scarce. Detroit's auto companies had too many factories, high wages and bloated bureaucratic management. Jobs began disappearing in 2006 and 2007 as U.S. automakers tried desperately to restructure. Dozens of auto suppliers were pushed into bankruptcy.

Then came 2008, when gas prices spiked and the financial crisis struck. The industry lost almost one in every four of its jobs. By the time GM and Chrysler got out of bankruptcy, in June 2009, the industry employed about half as many people as it did in 2000.

Sales and profits have risen ever since, and payrolls have followed.

GM, Ford and Chrysler are all making money for the first time since the mid-2000s and adding workers to build popular models like the revamped Ford Explorer. Foreign companies, stung by the high cost of exporting cars to the U.S. when the dollar is weak, are racing to build more products here.

Automakers are doing it with cheaper labor. Four years ago, the United Auto Workers agreed to a contract that allowed Detroit's carmakers to hire some new workers at $14 per hour, or half the starting pay of workers at that time. While the UAW doesn't represent workers at foreign-owned plants, those companies — like Volkswagen — generally match UAW pay.

#### **Auto industry has a major role in job creation**

Waldron, Think Progress economic reporter, 5-23-12

(Travis, 5-23-12, Think Progress, “Auto Industry Adds Thousands of Jobs To Meet Growing Demand, Proving Auto Rescue’s Success Yet Again,” <http://thinkprogress.org/economy/2012/05/23/489024/auto-industry-add-jobs/?mobile=nc>, accessed 7-2-12, LH)

The automobile industry has been a [consistent bright spot](http://thinkprogress.org/economy/2012/04/27/472704/auto-industry-economic-growth/) in the American economy over the last several months, as automakers have added jobs to meet growing demand. And news from the industry is only getting better, as new estimates expect automakers to sell 14.3 million cars in the United States in 2012 — 1.5 million more than they sold last year.

Factories for both foreign and domestic automakers are now working “[at maximum capacity](http://content.usatoday.com/communities/driveon/post/2012/05/auto-plants-ford-gm-chrysler/1#.T7zWxfn4Ju9)” and the industry is adding shifts and jobs to keep up with that rising demand, the USA Today reports:

Some plants are adding third work shifts. Others are piling on worker overtime and six-day weeks. And Ford Motor and Chrysler Group are cutting out or reducing the annual two-week July shutdown at several plants this summer to add thousands of vehicles to their output.

“We have many plants working at maximum capacity now,” says Ford spokeswoman Marcey Evans. “We’re building as many (cars) as we can.”

Chrysler and General Motors, the major beneficiaries of the auto rescue, have both reported their [best profits](http://thinkprogress.org/economy/2012/02/01/416100/chrysler-profit-97/) in more than a decade, and both were already [planning to add jobs](http://www.nytimes.com/2012/02/02/business/chrysler-earned-225-million-in-4th-quarter.html?ref=business) this year. With factories now struggling to meet demand, both foreign and domestic auto companies are planning to add [even more jobs](http://content.usatoday.com/communities/driveon/post/2012/05/auto-plants-ford-gm-chrysler/1#.T7zWxfn4Ju9) — and, as the Center for American Progress’ Adam Hersh and Jane Farrell noted in April, the industry has added [more than 139,000 jobs](http://thinkprogress.org/economy/2012/04/06/459857/auto-industry-bright-spot/) in the last three years.

The strength of the auto industry is yet another sign that letting it fail would have been [a major mistake](http://thinkprogress.org/economy/2012/02/21/429291/infographic-auto-industry-rescue/). Not only would it have cost more than [a million jobs](http://thinkprogress.org/economy/2012/02/17/427489/insiders-slam-romney-autos/) at a time when the economy was struggling, it would have prevented the current growth that is helping both the industry and the American economy recover.

### Econ Collapse is Bad

**Economic decline causes multiple scenarios for nuclear war – it turns all the impacts**

**Royal, DOD Director of Cooperative Threat Reduction, 10** (Jedediah, Director of Cooperative Threat Reduction – U.S. Department of Defense, “Economic Integration, Economic Signaling and the Problem of Economic Crises”, Economics of War and Peace: Economic, Legal and Political Perspectives, Ed. Goldsmith and Brauer, p. 213-215)

Less intuitive is how periods of economic decline may **increase the likelihood of external conflict**. Political science literature has contributed a moderate degree of attention to the impact of economic decline and the security and defence behaviour of interdependent states. Research in this vein has been considered at systemic, dyadic and national levels. Several notable contributions follow. First, on the systemic level, Pollins (2008) advances Modelski and Thompson's (1996) work on leadership cycle theory, finding that rhythms in the global economy are associated with the rise and fall of a pre-eminent power and the often **bloody transition** from one pre-eminent leader to the next. As such, exogenous shocks such as economic crises could usher in a redistribution of relative power (see also Gilpin. 1981) that leads to uncertainty about power balances, **increasing the risk of miscalculation** (Feaver, 1995). Alternatively, even a relatively certain redistribution of power could lead to a **permissive environment for conflict** as a rising power may seek to challenge a declining power (Werner. 1999). Separately, Pollins (1996) also shows that global economic cycles combined with parallel leadership cycles impact the likelihood of conflict among major, medium and small powers, although he suggests that the causes and connections between global economic conditions and security conditions remain unknown. Second, on a dyadic level, Copeland's (1996, 2000) theory of trade expectations suggests that 'future expectation of trade' is a significant variable in understanding economic conditions and security behaviour of states. He argues that interdependent states are likely to gain pacific benefits from trade so long as they have an optimistic view of future trade relations. However, if the expectations of future trade decline, particularly for difficult to replace items such as energy resources, **the likelihood for conflict increases, as states will** be inclined to **use** force to gain access to those resources. Crises could potentially be the trigger for decreased trade expectations either on its own or because it triggers protectionist moves by interdependent states.4 Third, others have considered the link between economic decline and external armed conflict at a national level. Blomberg and Hess (2002) find a strong correlation between internal conflict and external conflict, particularly during periods of economic downturn. They write: The linkages between internal and external conflict and prosperity are strong and mutually reinforcing. Economic conflict tends to spawn internal conflict, which in turn returns the favour. Moreover, the presence of a recession tends to amplify the extent to which international and external conflicts self-reinforce each other. (Blomberg & Hess, 2002. p. 89) Economic decline has also been linked with an **increase in** the likelihood of **terrorism** (Blomberg, Hess, & Weerapana, 2004), which has the capacity to spill across borders and lead to external tensions. Furthermore, crises generally reduce the popularity of a sitting government. "Diversionary theory" suggests that, when facing unpopularity arising from economic decline, sitting governments have increased incentives to fabricate **external military conflicts to create a 'rally around the flag' effect**. Wang (1996), DeRouen (1995). and Blomberg, Hess, and Thacker (2006) find supporting evidence showing that economic decline and use of force are at least indirectly correlated. Gelpi (1997), Miller (1999), and Kisangani and Pickering (2009) suggest that the tendency towards diversionary tactics are greater for democratic states than autocratic states, due to the fact that democratic leaders are generally more susceptible to being removed from office due to lack of domestic support. DeRouen (2000) has provided evidence showing that periods of weak economic performance in the United States, and thus weak Presidential popularity, **are statistically linked to an increase in the use of force**. In summary, recent economic scholarship positively correlates economic integration with an increase in the frequency of economic crises, whereas political science scholarship **links economic decline with external conflict** **at systemic, dyadic and national levels.**5 This implied connection between integration, crises and armed conflict has not featured prominently in the economic-security debate and deserves more attention.

**Economic collapse causes multiple worldwide nuclear wars**

**Kemp, President’s national security assistant, 10**

[Geoffrey Kemp, Director of Regional Strategic Programs at The Nixon Center, served in the White House under Ronald Reagan, special assistant to the president for national security affairs and senior director for Near East and South Asian affairs on the National Security Council Staff, Former Director, Middle East Arms Control Project at the Carnegie Endowment for International Peace, 2010, Brookings Institution Press, “The East Moves West: India, China, and Asia’s Growing Presence in the Middle East,” p. 233-4]

The second scenario, called Mayhem and Chaos, is the opposite of the first scenario; everything that can go wrong does go wrong. **The world economic situation weakens rather than strengthens**, and I**ndia, China, and Japan suffer a major reduction in their growth rates**, further **weakening the global economy**. As a result, **energy demand falls and the price of fossil fuels plummets, leading to a financial crisis for the energy-producing states, which are forced to cut back dramatically on expansion programs and social welfare. That** in turn **leads to political unrest: and nurtures** different **radical groups, including, but not limited to, Islamic extremists.** The **internal stability of** some **countries is challenged**, and **there are more “failed states**.” Most serious is **the collapse of the democratic government in Pakistan and its takeover by Muslim extremists, who then take possession of a large number of nuclear weapons. The danger of war between India and Pakistan increases significantly. Iran**, always worried about an extremist Pakistan, expands and **weaponizes its nuclear program. That** further **enhances nuclear proliferation in the Middle East, with Saudi Arabia, Turkey, and Egypt joining Israel and Iran as nuclear states**. Under these circumstances, **the potential for nuclear terrorism increases, and the possibility of a nuclear terrorist attack in either the Western world or in the oil-producing states may lead to a further devastating collapse of the world economic market, with a tsunami-like impact on stability. In this scenario, major disruptions can be expected, with dire consequences for two-thirds of the planet’s population.**

## Military

### Auto Industry Key to Military

#### **Auto industry technology key to U.S. military**

Malackowski, Ocean Tomo, LLC, Chairman and CEO, 8

(James E., 12-2-08, Ocean Tomo Provides services and consulting in the area of intellectual capital, including valuation, risk management, and sale/auction of IP assets, Detroit News, “It’s the auto technology, Congress,” <http://www.autoobserver.com/2008/12/its-detroits-invaluable-green-automotive-technologies-that-are-at-stake-congress.html>, accessed 7-6-12, LH)

Our national defense would also be adversely affected. Retired Army Gen. Wesley Clark recently noted in the New York Times that Detroit's automakers are developing innovative electric motors, many with permanent magnet technology with immediate military use. And only the auto industry, with its vast purchasing power, can establish a domestic advanced battery industry. Likewise, domestic fuel cell production, with many critical military applications, depends on a vibrant auto industry.

No other U.S. industry would have the private resources or an incentive to make the massive research and development investments required. If our nation ever plans to address the importance of clean technology, climate changes, and energy efficiency, the future of these proprietary technologies must be a priority in Washington, not just Detroit.

#### **Auto industry key to national security- Humvee proves**

Clark, U.S. Army, retired general, 8

(Wesley K., 11-17-08, The New York Times, “What’s Good for G.M. Is Good for the Army,” <http://www.nytimes.com/2008/11/16/opinion/16clark.html>, accessed 7-6-12, LH)

AMERICA’S automobile industry is in desperate trouble. Financial instability, the credit squeeze and closed capital markets are hurting domestic automakers, while decades of competition from foreign producers have eroded market share and consumer loyalty. Some economists question the wisdom of Washington’s intervening to help the Big Three, arguing that the automakers should pay the price for their own mistakes or that the market will correct itself. But we must act: aiding the American automobile industry is not only an economic imperative, but also a national security imperative.

When President Dwight Eisenhower observed that America’s greatest strength wasn’t its military, but its economy, he must have had companies like General Motors and Ford in mind. Sitting atop a vast pyramid of tool makers, steel producers, fabricators and component manufacturers, these companies not only produced the tanks and trucks that helped win World War II, but also lent their technology to aircraft and ship manufacturing. The United States truly became the arsenal of democracy.

During the 1950s, advances in aviation, missiles, satellites and electronics made Detroit seem a little old-fashioned in dealing with the threat of the Soviet Union. The Army’s requests for new trucks and other basic transportation usually came out a loser in budget battles against missile technology and new modifications for the latest supersonic jet fighter. Not only were airplanes far sexier but they also counted as part of our military “tooth,” while much of the land forces’ needs were “tail.” And in those days, “more teeth, less tail” had become a key concept in military spending.

But in 1991, the Persian Gulf war demonstrated the awesome utility of American land power, and the Humvee (and its civilian version, the Hummer) became a star. Likewise, the ubiquitous homemade bombs of the current Iraq insurgency have led to the development of innovative armor-protected wheeled vehicles for American forces, as well as improvements in our fleets of Humvees, tanks, armored fighting vehicles, trucks and cargo carriers.

In a little more than a year, the Army has procured and fielded in Iraq more than a thousand so-called mine-resistant ambush-protected vehicles. The lives of hundreds of soldiers and marines have been saved, and their tasks made more achievable, by the efforts of the American automotive industry. And unlike in World War II, America didn’t have to divert much civilian capacity to meet these military needs. Without a vigorous automotive sector, those needs could not have been quickly met.

More challenges lie ahead for our military, and to meet them we need a strong industrial base. For years the military has sought better sources of electric power in its vehicles — necessary to allow troops to monitor their radios with diesel engines off, to support increasingly high-powered communications technology, and eventually to support electric propulsion and innovative armaments like directed-energy weapons. In sum, this greater use of electricity will increase combat power while reducing our footprint. Much research and development spending has gone into these programs over the years, but nothing on the manufacturing scale we really need.

Now, though, as Detroit moves to plug-in hybrids and electric-drive technology, the scale problem can be remedied. Automakers are developing innovative electric motors, many with permanent magnet technology, that will have immediate military use. And only the auto industry, with its vast purchasing power, is able to establish a domestic advanced battery industry. Likewise, domestic fuel cell production — which will undoubtedly have many critical military applications — depends on a vibrant car industry.

To be sure, the public should demand transformation and new standards in the auto industry before paying to keep it alive. And we should insist that Detroit’s goals include putting America in first place in hybrid and electric automotive technology, reducing the emissions of the country’s transportation fleet, and strengthening our competitiveness abroad.

This should be no giveaway. Instead, it is a historic opportunity to get it right in Detroit for the good of the country. But Americans must bear in mind that any federal assistance plan would not be just an economic measure. This is, fundamentally, about national security.

## Oil Dependence/Warming Internal Links

### Auto Industry Key to Warming/Green Technology

#### **Auto industry key to reduce CO2 emissions and develop green technology**

Lentz, Toyota, President and CEO, 9

(Jim, 11-17-09, Vital Speeches of the Day, “Cars: Enriching Our Lives, Our Economy and Our Future,” Academic Search Complete, p. 77-78, accessed 7-6-12, LH)

Well, that leads me to my third key point of the night ... that cars will play a vital role in our future.

We know we won’t give them up, but we also know we can’t continue on the same automotive path we’ve followed for the past century.

The first 100 years of the auto industry were about expansion and exploration ... the second century is about innovation and harmony.

Since we can’t live with cars in their current form ... and we can’t live without the benefits they bring ... we have to find a better way.

And that’s what Toyota and other major automakers are doing today ... developing better cars and other creative mobility solutions.

To do that, we’re concentrating on two critical areas ... increasing fuel economy and reducing emissions that harm our planet.

On air pollution, we’re making great progress. Using various technologies and cleaner fuels, cars today are 99% cleaner than those from the 1970s.

Yes … you heard right ... 99%!

But what about CO2 and other greenhouse gases?

Well, let’s talk about that for a minute.

Some people believe that automobiles are the worst offenders on CO2 ... but that’s not the case.

In the United States, autos account for about 17% of allman made carbon dioxide emissions, or less than one-fifth of the total.

That’s not low enough, but it is important to understand that ... although cars and trucks are one of the most visible sources of greenhouse gases in America ... they are NOT the major contributor.

Toyota has long supported global, economy-wide reductions of greenhouse gases, and we are committed to working with the U.S. and other governments to achieve these reductions in every market where we operate.

And our industry, as a whole, recently made a strong commitment to cut greenhouse gases by committing to achieve higher federal mileage standards.

We’ll do that by burning less gas because CO2 emissions are directly related to fuel consumption. Higher mileage means less carbon dioxide coming out of tailpipes.

How much less?

Our industry is committed to 30% reduction by 2020 ... nearly one-third less than today’s emissions.

Think about that for a minute.

That’s equivalent to closing 50 mid-sized coal-fired power plants ... 50!

Now, before I get any letters from the coal industry, let me acknowledge that they are working hard on cleanburning technology.

In any event, the auto industry is making a sizable commitment that will make it a leader in the reduction of CO2. And we’re not stopping there.

The auto industry spends $86 billion per year on Research and Development ... more than any other manufacturing industry. And I’m proud to note that Toyota is ranked by Booz & Company as the No. 1corporation in R&D, spending $9 billion a year ... or an average of more than $1 million per hour.

Even better, our industry’s massive research is starting to pay off.

According to the Alliance of Automobile Manufacturers, there are more than 50 technologies available this year ... 2009 ... that reduce emissions ... .increase mileage ... or allow vehicles to run on clean fuels. They range from variable valve timing and stratifiedcharge combustion to superchargers ... direct injection ... and sophisticated gas/electric hybrids found in vehicles like our Prius.

In fact, ... according to the recently released federal Fuel Economy Guide ... in 2010, consumers can select from more than 193 cars and trucks that achieve 30 miles per gallon or greater on the highway ... a 47% increase over 2009!

#### **U.S. auto industry key to green technology**

Amos, D.C. Autos Examiner, 8

(Chris, 12-5-08, Examiner, “Opinion: Big 3’s demise will stall green innovation, hurt military,” <http://www.examiner.com/article/opinion-big-3-s-demise-will-stall-green-innovation-hurt-military>, accessed 7-6-12, LH)

James E. Malackowski, president and CEO of Ocean Tomo LLC, a Chicago-based merchant bank specializing in intellectual property financial products, believes much of the progress and potential for privately-funded green technology hinges upon the success or failure of the U.S. [auto industry](http://www.examiner.com/topic/auto-industry/articles). He goes on to say that the Detroit Big 3 are responsible for the lion’s share of green innovation when compared to other global auto manufacturers.

According to Mr. Malackowski, Ford and GM hold approximately 1/3 of all green technology patents, with an 85% domestic stake in all current emerging technology patent which will lead to “further energy independence, serve as the building blocks for creating and improving alternative power plants, and increasing fuel efficiency for standard or hybrid vehicles, both of which will decrease harmful emissions.”

#### **U.S. auto industry key to green technology**

Malackowski, Ocean Tomo, LLC, Chairman and CEO, 8

(James E., Ocean Tomo Provides services and consulting in the area of intellectual capital, including valuation, risk management, and sale/auction of IP assets, 12-2-08, Detroit News, “It’s the auto technology, Congress,” <http://www.autoobserver.com/2008/12/its-detroits-invaluable-green-automotive-technologies-that-are-at-stake-congress.html>, accessed 7-6-12, LH)

General Motors, Ford and Chrysler are collectively one of the world's primary sources for the research and development of green and fuel-efficient technologies. As Washington decides on aid to the ailing auto industry, top consideration should be given to the significant potential of these Big 3 technologies for stimulating economic and job growth and creating a greener and more fuel-efficient world.

In fact, much of the privately funded green and energy innovation in the United States will stall or likely never come to fruition if the domestic automobile industry fails.

The important global role played by the Big-3 in these fields is clarified by comparing four of their key patent portfolios with those of the other 15 largest global auto manufacturers -- emission control, mainly catalytic converters and related chemistry; fuel cells; hybrid and electric vehicles, mostly motor and battery innovation; and emerging related technologies developed by these same firms including solar, wind and other green inventions.

Consider that:

GM has higher average quality and newer green technology and patents than the other 14 automakers combined.

Ford and GM together hold approximately a third of all green technology patents and the related value.

GM has 70 percent of the patents in the emerging technology category. This domestic share increases to 85 percent if Ford is added.

Ford owns 30 percent of all patents with a similar related value measure in emission control innovation.

Clearly, Detroit's Big 3 manufacturers own valuable green and clean air technologies, both in an absolute sense as well as relative to their international competitors. Any long-term plan for these three corporations should focus and build upon the innovation advantages they possess.

The Big-3's green technologies, for instance, can help the United States move towards further energy independence, serve as the building blocks for creating and improving alternative power plants, and increasing fuel efficiency for standard or hybrid vehicles, both of which will decrease harmful emissions.

If GM, Ford or Chrysler should fail, many of these key technologies would likely be lost to the United States. Green technologies pioneered by supplier manufacturers of the automotive industry -- like battery companies -- are also likely to be lost. Indeed, the bankruptcy of any or all the Big 3 would create a historically unique opportunity for their foreign competitors to acquire a vast amount of crown jewel technology for a fraction of their true value.

### Green Technology Solves Warming

#### **Only innovation can stop global warming**

Gates, Microsoft, co-founder, 10

(Bill, 1-20-10, Huffington Post, “Why We Need Innovation, Not Just Insulation,” <http://www.huffingtonpost.com/bill-gates/why-we-need-innovation-no_b_430699.html>, accessed 7-7-12, LH)

Still, the amount of CO2 avoided by these kinds of modest reduction efforts will not be the key to what happens with climate change in the long run.

In fact it is doubtful that any such efforts in the rich countries will even offset the increase coming from richer lifestyles in places like China, India, Brazil, Indonesia, Mexico, etc.

Innovation in transportation and electricity will be the key factor.

One of the reasons I bring this up is that I hear a lot of climate change experts focus totally on 2025 or talk about how great it is that there is so much low hanging fruit that will make a difference.

This mostly focuses on saving a little bit of energy, which by itself is simply not enough. The need to get to zero emissions in key sectors almost never gets mentioned. The danger is people will think they just need to do a little bit and things will be fine.

If CO2 reduction is important, we need to make it clear to people what really matters - getting to zero.

With that kind of clarity, people will understand the need to get to zero and begin to grasp the scope and scale of innovation that is needed.

However all the talk about renewable portfolios, efficiency, and cap and trade tends to obscure the specific things that need to be done.

To achieve the kinds of innovations that will be required I think a distributed system of R&D with economic rewards for innovators and strong government encouragement is the key. There just isn't enough work going on today to get us to where we need to go.

My point is not to denigrate efficiency. Slowing the growth of CO2 ppm is of course a good thing. And there are of course lots of cheap, and in many cases self-funding efficiency gains to be made.

We should at the least fix market barriers and dysfunctions that prevent these gains from being realized. That's just being smart.

But it's not enough to slow the growth of CO2 given the strength of demand driven by the poor who need to get access energy. And, we have to actually stop it at some point.

No amount of insulation will get us there, only innovating our way to essentially 0-carbon energy technology will do it. If we focus on just efficiency to the exclusion of innovation, or imagine that we can worry about efficiency first and worry about energy innovation later, we won't get there.

The world is distracted from what counts on this issue in a big way.

#### Green technology solves global warming

Olson, Minnesota Public Radio, 7

(Dan, 2-15-07, Minnesota Public Radio, “Can technology save us from global warming?,” http://minnesota.publicradio.org/display/web/2007/02/14/global\_warming\_tech/, accessed 7-7-12, LH)

History is filled with examples of how people and technology can solve environmental problems once we get around to it.

Four decades ago the environmental crisis was acid rain threatening the world's forests and lakes. And "speed of light" doesn't quite describe how we responded to that threat.

As early as 1850 the British government knew the soft coal being burned in the country emitted smoke that created sulfuric and nitric acid carried to earth by rainfall.

It took more than a hundred years, l968, before scientists sounded the alarm that acid rain was waging what amounted to chemical warfare on forests and lakes.

Ten years after that, l978, University of Minnesota ecologist Eville Gorham and other scientists handed President Jimmy Carter a plan to solve the problem. "We could fix it by reducing sulfur emissions largely, and that's gone fairly well," he says.

Well enough, in fact, that acid rain, while still an issue, is much less of a threat.

The 81 year old Gorham is retired now. He's a tall, courtly native of Canada.

He acknowledges that technology and human intervention have helped avert other environmental crisis. The growth of the world's burgeoning population is slowing, the chemicals creating the ozone hole have been largely outlawed and there's progress in cleaning up polluted lands and waters.

So, you might guess Gorham would be an optimist when it comes to solving global warming, but he's not.

He says climate is different from those other crises. Why? Because it isn't due to just one thing. It involves all of the earth's ecosystems. And Gorham says we don't know how all the pieces fit together.

What if, he says, the world's peat deposits - vast beds of decayed plant matter - were to dry out from global warming and catch fire? "We get those forest fires on the peatland forests sinking into the peat which can smolder and dump carbon dioxide into the atmosphere for decades.

Eville Gorham fears the problem is too big and people are too small-minded to solve it. "In my 81 years I have not seen an accompanying growth in wisdom and in what I might call loving kindness for the least fortunate among us, and I think our children are going to pay a terrible price for that," he says.

Not a happy outlook from one of the world's most eminent ecologists.

That's one side of the coin. The other side is Gorham's good friend and fellow University of Minnesota ecologist Clarence Lehman. Lehman says climate change is like earlier problems we've fixed just on a larger scale. "With known technology today there are 15 things any 7 of which if we do them now in a sustained effort for 50 years will hold carbon constant in the atmosphere. That buys 50 years."

Fifty years, Lehman says, to find new ideas and technology that will actually reduce carbon levels.

Until then, he says, we can apply what we already know - energy conserving technology for buildings, more fuel efficient vehicles, alternative energy including clean coal and, yes, nuclear power - used on a vast scale to stop the projected doubling of carbon dioxide emissions.

### Making Green Cars Now

#### Auto industry making green cars now – consumer demand

Zack Investment Research, 6-26-12

(6-26-12, NASDAQ, “Auto Industry Stock Outlook- June 2012- Zack’s Analyst Interviews,” <http://community.nasdaq.com/News/2012-06/auto-industry-stock-outlook-june-2012-zacks-analyst-interviews.aspx?storyid=151289>, accessed 7-3-12, LH)

To remain competitive, the automakers will need to design vehicles that will cater to consumers in both mature and emerging markets while manufacturing them at low costs, using the most advanced technology. The recent trend shows that automakers are concentrating on offering more optional features (to save money on gas), even on the small and less gas-guzzler vehicles, in order to attract buyers. The sale of optional features is helping them offset lower profit margins for small cars relative to large trucks.

### Will Have to Make Green Cars

#### Auto industry has to make cars – consumer demand

Zack Investment Research, 6-26-12

(6-26-12, NASDAQ, “Auto Industry Stock Outlook- June 2012- Zack’s Analyst Interviews,” <http://community.nasdaq.com/News/2012-06/auto-industry-stock-outlook-june-2012-zacks-analyst-interviews.aspx?storyid=151289>, accessed 7-3-12, LH)

Rising fuel prices and global warming have turned attention to the auto industry that either rely less on traditional fossil fuels or use cheaper renewable sources of energy. Thus, "green" alternatives such as fuel-efficient electric vehicles (EVs) and hybrid vehicles will attract consumers in affluent countries while flex-fuels such as ethanol and natural gas will be highly demanded in the emerging auto markets due to their suitability with the local climate and resource base.   
Consequently, there will be a variety of powertrain technologies in the auto industry in this decade and "green" cars are likely to represent about 30% of total global sales in developed auto markets. 

### Government Regulations Solves

#### Auto industry agreed to government regulations – solves warming

Zack Investment Research, 6-26-12

(6-26-12, NASDAQ, “Auto Industry Stock Outlook- June 2012- Zack’s Analyst Interviews,” <http://community.nasdaq.com/News/2012-06/auto-industry-stock-outlook-june-2012-zacks-analyst-interviews.aspx?storyid=151289>, accessed 7-3-12, LH)

The role of governments is highly significant. Governments in all major countries have become active auto industry players. Their energy and environmental policies will be strongly responsible in molding the auto industry in the coming years. In late 2011, 13 major automakers, including Ford, GM, Chrysler, BMW, Honda, Hyundai ( [HYMLF](http://www.nasdaq.com/symbol/hymlf) ), Jaguar/Land Rover, Kia, Mazda, Mitsubishi, Nissan, Toyota and Volvo have signed letters of commitment with the U.S. Government to upgrade the fuel economy standard of cars and light-duty trucks to 54.5 miles per gallon (mpg) by 2025. The new standard is more than double the Corporate Average Fuel Economy (CAFE) standard of 24.1 mpg. It is expected to save 12 billion barrels of oil and curtail oil consumption by 2.2 million barrels per day, which accounts for half of the oil imported by the U.S. from OPEC countries on a daily basis. The new standard also aimed at reducing carbon pollution to 163 grams per mile of CO2. With this, more than 6 billion metric tons of greenhouse gases will be curbed over the time span of the program, which accounts for more than the total amount of carbon dioxide emitted by the U.S. in 2010.

## Warming Impacts

### Warming Bad Impact

#### Warming causes extinction

Tickell, Environmental Researcher, 8

(Oliver, Environmental Researcher, The Guardian, August 11 2008, <http://www.guardian.co.uk/commentisfree/2008/aug/11/climatechange>, JMB, accessed 6-23-11)

We need to get prepared for four degrees of global warming, Bob Watson told the Guardian last week. At first sight this looks like wise counsel from the climate science adviser to Defra. But the idea that we could adapt to a 4C rise is absurd and dangerous. Global warming on this scale would be a catastrophe that would mean, in the immortal words that Chief Seattle probably never spoke, "the end of living and the beginning of survival" for humankind. Or perhaps the beginning of our extinction. The collapse of the polar ice caps would become inevitable, bringing long-term sea level rises of 70-80 metres. All the world's coastal plains would be lost, complete with ports, cities, transport and industrial infrastructure, and much of the world's most productive farmland. The world's geography would be transformed much as it was at the end of the last ice age, when sea levels rose by about 120 metres to create the Channel, the North Sea and Cardigan Bay out of dry land. Weather would become extreme and unpredictable, with more frequent and severe droughts, floods and hurricanes. The Earth's carrying capacity would be hugely reduced. Billions would undoubtedly die. Watson's call was supported by the government's former chief scientific adviser, Sir David King, who warned that "if we get to a four-degree rise it is quite possible that we would begin to see a runaway increase". This is a remarkable understatement. The climate system is already experiencing significant feedbacks, notably the summer melting of the Arctic sea ice. The more the ice melts, the more sunshine is absorbed by the sea, and the more the Arctic warms. And as the Arctic warms, the release of billions of tonnes of methane – a greenhouse gas 70 times stronger than carbon dioxide over 20 years – captured under melting permafrost is already under way. To see how far this process could go, look 55.5m years to the Palaeocene-Eocene Thermal Maximum, when a global temperature increase of 6C coincided with the release of about 5,000 gigatonnes of carbon into the atmosphere, both as CO2 and as methane from bogs and seabed sediments. Lush subtropical forests grew in polar regions, and sea levels rose to 100m higher than today. It appears that an initial warming pulse triggered other warming processes. Many scientists warn that this historical event may be analogous to the present: the warming caused by human emissions could propel us towards a similar hothouse Earth

#### Warming causes extinction and comparatively outweighs other impacts

Deibel, National War College international relations professor, 7

(Terry L. Deibel, professor of IR @ National War College, July 2007 “Foreign Affairs Strategy: Logic for American Statecraft,” Book, Cambridge University Press)

Finally, there is one major existential threat to American security (as well as prosperity) of a nonviolent nature, which, though far in the future, demands urgent action. It is the threat of global warming to the stability of the climate upon which all earthly life depends. Scientists worldwide have been observing the gathering of this threat for three decades now, and what was once a mere possibility has passed through probability to near certainty. Indeed not one of more than 900 articles on climate change published in refereed scientific journals from 1993 to 2003 doubted that anthropogenic warming is occurring. “In legitimate scientific circles,” writes Elizabeth Kolbert, “it is virtually impossible to find evidence of disagreement over the fundamentals of global warming.” Evidence from a vast international scientific monitoring effort accumulates almost weekly, as this sample of newspaper reports shows: an international panel predicts “brutal droughts, floods and violent storms across the planet over the next century”; climate change could “literally alter ocean currents, wipe away huge portions of Alpine Snowcaps and aid the spread of cholera and malaria”; “glaciers in the Antarctic and in Greenland are melting much faster than expected, and…worldwide, plants are blooming several days earlier than a decade ago”; “rising sea temperatures have been accompanied by a significant global increase in the most destructive hurricanes”; “NASA scientists have concluded from direct temperature measurements that 2005 was the hottest year on record, with 1998 a close second”; “Earth’s warming climate is estimated to contribute to more than 150,000 deaths and 5 million illnesses each year” as disease spreads; “widespread bleaching from Texas to Trinidad…killed broad swaths of corals” due to a 2-degree rise in sea temperatures. “The world is slowly disintegrating,” concluded Inuit hunter Noah Metuq, who lives 30 miles from the Arctic Circle. “They call it climate change…but we just call it breaking up.” From the founding of the first cities some 6,000 years ago until the beginning of the industrial revolution, carbon dioxide levels in the atmosphere remained relatively constant at about 280 parts per million (ppm). At present they are accelerating toward 400 ppm, and by 2050 they will reach 500 ppm, about double pre-industrial levels. Unfortunately, atmospheric CO2 lasts about a century, so there is no way immediately to reduce levels, only to slow their increase, we are thus in for significant global warming; the only debate is how much and how serous the effects will be. As the newspaper stories quoted above show, we are already experiencing the effects of 1-2 degree warming in more violent storms, spread of disease, mass die offs of plants and animals, species extinction, and threatened inundation of low-lying countries like the Pacific nation of Kiribati and the Netherlands at a warming of 5 degrees or less the Greenland and West Antarctic ice sheets could disintegrate, leading to a sea level of rise of 20 feet that would cover North Carolina’s outer banks, swamp the southern third of Florida, and inundate Manhattan up to the middle of Greenwich Village. Another catastrophic effect would be the collapse of the Atlantic thermohaline circulation that keeps the winter weather in Europe far warmer than its latitude would otherwise allow. Economist William Cline once estimated the damage to the United States alone from moderate levels of warming at 1-6 percent of GDP annually; severe warming could cost 13-26 percent of GDP. But the most frightening scenario is runaway greenhouse warming, based on positive feedback from the buildup of water vapor in the atmosphere that is both caused by and causes hotter surface temperatures. Past ice age transitions, associated with only 5-10 degree changes in average global temperatures, **took place in just decades**, even though no one was then pouring ever-increasing amounts of carbon into the atmosphere. Faced with this specter, the best one can conclude is that “humankind’s continuing enhancement of the natural greenhouse effect is akin to playing Russian roulette with the earth’s climate and humanity’s life support system. At worst, says physics professor Marty Hoffert of New York University, “we’re just going to burn everything up; we’re going to heat the atmosphere to the temperature it was in the Cretaceous when there were crocodiles at the poles, and then everything will collapse.” During the Cold War, astronomer Carl Sagan popularized a theory of nuclear winter to describe how a thermonuclear war between the United States and the Soviet Union would not only destroy both countries but possibly end life on this planet. Global warming is the post-Cold War era’s **equivalent of nuclear winter** **at least** as serious and **considerably better supported scientifically**. Over the long run it puts dangers form terrorism and traditional military challenges to shame. It is a threat not only to the security and prosperity to the United States, but potentially to the continued **existence of life on this planet**.

**Warming is a conflict multiplier – makes all their impacts worse**

**Knickerbocker, Christian Science Monitor, citing US Generals, 7**

(Brad Knickerbocker, Staff writer at the Christian Science Monitor, April 19, 2007, http://www.csmonitor.com/2007/0419/p02s01-usgn.html , *Christian Science Monitor*)

For years, the debate over global warming has focused on the three big "E's": environment, energy, and economic impact. This week it officially entered the realm of national security threats and avoiding wars as well. A platoon of retired US generals and admirals warned that global warming "presents significant national security challenges to the United States." The United Nations Security Council held its first ever debate on the impact of climate change on conflicts. And in Congress, a bipartisan bill would require a National Intelligence Estimate by all federal intelligence agencies to assess the security threats posed by global climate change. Many experts view climate change as a "threat multiplier" that intensifies instability around the world by worsening water shortages, food insecurity, disease, and flooding that lead to forced migration. That's the thrust of a 35-page report (PDF) by 11 admirals and generals this week issued by the Alexandria, Va.-based national security think tank The CNA Corporation. The study, titled National Security and the Threat of Climate Change, predicts: "Projected climate change will seriously exacerbate already marginal living standards in many Asian, African, and Middle Eastern nations, causing widespread political instability and the likelihood of failed states.... The chaos that results can be an incubator of civil strife, genocide, and the growth of terrorism. "The U.S. may be drawn more frequently into these situations, either alone or with allies, to help provide stability before conditions worsen and are exploited by extremists. The U.S. may also be called upon to undertake stability and reconstruction efforts once a conflict has begun, to avert further disaster and reconstitute a stable environment." "We will pay for this one way or another," retired Marine Gen. Anthony Zinni, former commander of American forces in the Middle East and one of the report's authors, told the Los Angeles Times. "We will pay to reduce greenhouse gas emissions today … or we'll pay the price later in military terms. And that will involve human lives." As quoted in the Associated Press, British Foreign Secretary Margaret Beckett, who presided over the UN meeting in New York April 17, posed the question "What makes wars start?" The answer: "Fights over water. Changing patterns of rainfall. Fights over food production, land use. There are few greater potential threats to our economies ... but also to peace and security itself." This is the concern behind a recently introduced bipartisan bill by Sens. Richard Durbin (D) of Illinois and Chuck Hagel (R) of Nebraska. It would require all US intelligence agencies – the CIA, the NSA, the Pentagon, and the FBI – to conduct a comprehensive review of potential security threats related to climate change around the world.

## Oil Dependence Impacts

### Extinction

**Continued oil dependence will lead to extinction - Shifting away is key to a sustainable human existence**

Beddor et al, Center for American Progress National Security Intern, 9

(Christopher, Winny Chen is a Policy Analyst at the Center for American Progress, Rudy deLeon is the Senior Vice President of National Security and International Policy at Center for American Progress, Shiyong Park is an intern with the National Security team at the Center for American Progress Action Fund, Daniel J. Weiss is a Senior Fellow and the Director of Climate Strategy at American Progress, Center for American Progress, August 2009, Center for American Progress, “Securing America’s Future: Enhancing Our National Security by Reducing Oil Dependence and Environmental Damage,” http://www.americanprogress.org/issues/2009/08/pdf/energy\_security.pdf, p. 16, accessed 6-29-12, CNM)

For more than three decades the United States has repeatedly erred on the side of inaction. Policymakers, rather than pursuing long-term sustainable goals, were swayed by the prospect of immediate benefits or political risks. And the public was too focused on falling prices at the pump after successive energy crises to see the bigger picture of ever- escalating oil imports.

We stand at a similar crossroads today, but this time it is no longer a matter of financial inconvenience. It is a matter of national security, global economy, and sustainable human existence.

### Economy

**Oil dependence is the largest factor in our trade deficit**

Fitzsimmons, Seeking Alpha contributor, 10

(Michael, Seeking Alpha is a stock market news and opinion source, 11-28-10, "Foreign Oil Dependency: The Root Cause of America's Economic Pain," http://seekingalpha.com/article/238920-foreign-oil-dependency-the-root-cause-of-america-s-economic-pain, accessed 6-29-12, CNM)

The U.S. Commerce Department reported September 2010's trade deficit to be $44 billion dollars. During that month, crude oil averaged around $75/barrel and the U.S. imported about 12,000,000 barrels/day. This means the September 2010 monthly bill for oil imports was roughly $27 billion dollars.

The point is this: out of a $44 billion dollar monthly trade deficit, $27 billion of that was for one commodity alone. Unfortunately for the U.S., it happens to be the most strategic commodity of all: OIL. Put another way, imported oil made up 62% of the U.S. monthly trade deficit. This is not an aberration - it goes on month after month, year after year. And as the price of oil goes up, so too does this problem. It is quite simply draining away the wealth of America. We are burning it up in our cars and trucks.

### Terrorism

**Dependency on foreign oil funds terrorism**

Harder, National Journal Energy and Environment Correspondent, 10

(Amy, she reports on energy and the environment for National Journal and moderates an expert blog on the topic as well, 6/12/2010, “Are We Funding Iranian Terrorists?,” National Journal, Academic Search Complete, Accessed 6/29/12, bs)

As long as Congress continues to defer action on comprehensive climate and energy legislation, the United States is funding -- by way of importing oil from the Middle East -- terrorist activities in Iran and other unstable countries in the region. So goes the argument made by Senate Foreign Relations Committee Chairman John Kerry, D-Mass., chief architect of the proposed American Power Act, as well as by progressive groups supporting the bill, including the Center for American Progress, the Natural Resources Defense Council, and the Truman National Security Project. "We're paying the Ahmadinejad Iran tax every single day," Kerry told reporters recently, referring to Iranian President Mahmoud Ahmadinejad, whose defense of his country's nuclear ambitions has been unstinting. "We send $100 million a day to Iran. Does that make sense? Does it make sense nine years after 9/11 to be more dependent on foreign oil and sending $365 billion-plus a year to countries who don't like us very much? Some of which funds the wars against us?" Kerry asked. Kerry's rhetoric on the climate-change bill -- and the legislation's potential impact on terrorism and on U.S. dependence on foreign oil -- has become more heated in the weeks since he and Sen. Joe Lieberman, ID-Conn., unveiled the legislation on May 12 without their Republican negotiating partner, Lindsey Graham of South Carolina. In conversations with National Journal, experts wasted no time poking holes in the specific connection between Iranian oil profits and the climate bill. But many of them support the general notion that Middle Eastern oil money does, at least in part, fund terrorism. A U.S. climate bill's effect on that link remains unclear and may only be realized decades after the measure's passage. In a nutshell, this is how Kerry and the progressive groups reached the conclusion that Tehran benefits from inaction on a climate-change bill, even though the U.S. does not import any oil directly from Iran: The Massachusetts Institute of Technology did research in 2007 that showed that a firm cap on carbon emissions at both the domestic and global levels would eventually reduce world oil prices. The Center for American Progress analyzed the MIT report and concluded that Tehran would lose $100 million a day in oil revenue if the U.S. were to pass a bill that priced carbon and if (and this is a big if) a global climate-change policy were put into place. The worldwide decline in oil consumption would trigger a price drop that would sap profits from Iran's oil exports, the center's analysis shows. Advocacy groups -- including the Truman Project's Operation Free, a coalition of Iraq and Afghanistan war veterans and national security organizations that support climate legislation, and the American Values Network, a faith-based coalition that seeks action on climate change -- have turned those reports into an ad campaign suggesting that the American Power Act "would cut Iran's oil profits by up to $100 million -- every day." At an event in his office in April, Kerry stood with several members of Operation Free as the group unveiled its "Iran Oil Profits Counter," a digital clock-like device that tallies the oil profits that the Kerry-Lieberman bill would deny to Tehran. Next to the rising number is a large photo of a smirking Ahmadinejad.

### Hegemony

**Oil dependency destroys leadership – gives other countries power and decreases US’s leverage in key strategic regions**

Beddor et al, Center for American Progress National Security Intern, 9

(Christopher, *Winny Chen* is a Policy Analyst at the *Center for American Progress, Rudy deLeon* is the Senior Vice President of National Security and International Policy at Center for *American Progress,*  Shiyong Park is an intern with the National Security team at the *Center for American Progress* Action Fund, Daniel J. Weiss is a Senior Fellow and the Director of Climate Strategy at American Progress, Center for American Progress, August 2009, “Securing America’s Future: Enhancing Our National Security by Reducing Oil Dependence and Environmental Damage,” p. 8, http://www.americanprogress.org/issues/2009/08/pdf/energy\_security.pdf, accessed 6-29-12, CNM)

The United States will remain vulnerable to volatile oil prices and supply shortages as long as it heavily depends on other nations for fuel and energy. Its need for steady supplies of oil means it must adjust its behavior and strategies in order to maintain relations with less- than-savory regimes including Venezuela, Nigeria, and Russia. These countries, as well as smaller nations such as Angola, will therefore hold an increasingly disproportional amount of bilateral and regional power, while the United States has diminished leverage and con- strained policy options in strategic regions such as the Middle East and Central Asia.

This trend will be exacerbated as continued depletion of oil production and exports from friendly regimes forces the United States to import more from antagonistic countries in the future in order to offset the tapering supply.

Former military officials are speaking out on this issue. The CNA Military Advisory Board, a group of distinguished retired military leaders, issued a report in May 2009 arguing that

America’s reliance on foreign oil poses a serious threat to U.S. national security. The report, entitled “Powering America’s Defense: Energy and the Risks to National Security,” con- cluded that “U.S. dependence on oil weakens international leverage, undermines foreign policy objectives, and entangles America with unstable or hostile regimes.”29

### Warming

**Oil dependence driven warming causes multiple scenarios for conflict, kills readiness, and prevents quick disaster response capabilities**

Beddor et al, Center for American Progress National Security Intern, 9

(Christopher, *Winny Chen* is a Policy Analyst at the *Center for American Progress, Rudy deLeon* is the Senior Vice President of National Security and International Policy at Center for *American Progress,*  Shiyong Park is an intern with the National Security team at the *Center for American Progress* Action Fund, Daniel J. Weiss is a Senior Fellow and the Director of Climate Strategy at American Progress, Center for American Progress, August 2009, “Securing America’s Future: Enhancing Our National Security by Reducing Oil Dependence and Environmental Damage,” p. 8-9, http://www.americanprogress.org/issues/2009/08/pdf/energy\_security.pdf, accessed 6-29-12, CNM)

The significant contribution of oil combustion to global warming leads to serious national security concerns as well. As mentioned earlier, oil consumption results in far-spanning and acute environmental damage, including global warming. In 2007, the CNA Military

Advisory Board published a study on the effect of climate change on American security interests. Their study found that “climate change poses a serious threat to America’s national security ... [It] acts as a threat multiplier for instability in some of the most vola- tile regions of the world.”

It will:

• Create destabilizing conditions, including reduced access to fresh water, impaired food production, health catastrophes, and loss of land, which will place additional strains on weak governments.

• Exacerbate marginal living standards in developing countries in Asia, Africa, and the Middle East, creating widespread instability and increasing the likelihood of conflict, mass migrations, and failed states.

Make Defense Department operations more vulnerable because extreme environmental conditions will considerably increase operation and maintenance costs, compromise seal-level military bases, complicate ship and aircraft operations, and expose the national power grid upon which DoD is heavily reliant. 32

These findings were backed up by a 2007 Center for American Progress report, “The Security Challenges of Climate Change,” which in addition to these findings identified other effects on national security. These included “increased U.S. border stress due to the severe effects of climate change in parts of Mexico and the Caribbean” and a “strain on the capacity of the United States—and in particular the U.S. military—to act as a ‘first responder’ to international disasters and humanitarian crises due to their increased fre- quency, complexity, and danger.”33

### AT – Oil Dependence Inevitable

#### Auto industry reducing oil imports

Zack Investment Research, 6-26-12

(6-26-12, NASDAQ, “Auto Industry Stock Outlook- June 2012- Zacks Analyst Interviews,” <http://community.nasdaq.com/News/2012-06/auto-industry-stock-outlook-june-2012-zacks-analyst-interviews.aspx?storyid=151289>, accessed 7-3-12, LH)

The role of governments is highly significant. Governments in all major countries have become active auto industry players. Their energy and environmental policies will be strongly responsible in molding the auto industry in the coming years. In late 2011, 13 major automakers, including Ford, GM, Chrysler, BMW, Honda, Hyundai ( [HYMLF](http://www.nasdaq.com/symbol/hymlf) ), Jaguar/Land Rover, Kia, Mazda, Mitsubishi, Nissan, Toyota and Volvo have signed letters of commitment with the U.S. Government to upgrade the fuel economy standard of cars and light-duty trucks to 54.5 miles per gallon (mpg) by 2025. The new standard is more than double the Corporate Average Fuel Economy (CAFE) standard of 24.1 mpg. It is expected to save 12 billion barrels of oil and curtail oil consumption by 2.2 million barrels per day, which accounts for half of the oil imported by the U.S. from OPEC countries on a daily basis. The new standard also aimed at reducing carbon pollution to 163 grams per mile of CO2. With this, more than 6 billion metric tons of greenhouse gases will be curbed over the time span of the program, which accounts for more than the total amount of carbon dioxide emitted by the U.S. in 2010.

## AT – Oil Lobbies

### Cutting Emissions Now

#### **The U.S. is cutting emissions now**

Koch, USA Today, 2011

(Wendy, 11-18-11, USA Today, “Obama seeks to double auto fuel economy by 2025,” <http://content.usatoday.com/communities/greenhouse/post/2011/11/obama-seeks-to-double-auto-fuel-efficiency/1#.T-4nT-ZOxJN>, accessed 7-3-12, LH)

In an historic move to boost fuel efficiency, the Obama administration proposed Wednesday to nearly double the required miles per gallon for passenger cars and light trucks by 2025.

The formal proposal follows President Obama's agreement with 13 major automakers, announced in July, to gradually boost these vehicles' fuel economy to the equivalent of 54.5 miles per gallon -- up from the current standard of 27.3 mpg. Last year, the administration finalized rules to hike the standard to 35.5 mpg by 2016.

""We expect this program will not only save consumers money, it will ensure automakers have the regulatory certainty they need to make key decisions that create jobs and invest in the future," U.S. Transportation Secretary Ray LaHood said in a joint announcement with the U.S. Environmental Protection Agency. He said they'll also reduce U.S. dependence on oil and protect the climate.

### Influence Weakened

#### **Oil lobbies losing influence – Keystone XL proves**

Dwyer, ABC News White House reporter, et al., 2012

(Devin, Kirit Radia, ABC news correspondent in Moscow, John R. Parkinson, News Digital Journalist, Producer, and Reporter for ABC News, Jake Tapper, ABC News Correspondent, 1-18-12, ABC News, “President Obama Rejects Keystone XL Pipeline,” <http://abcnews.go.com/Politics/OTUS/president-obama-rejects-keystone-xl-pipeline/story?id=15387980&singlePage=true>, accessed 7-3-12, LH)

The Obama administration today formally rejected a bid by Canadian energy company TransCanada to build a $7 billion oil pipeline linking the tar sands of Alberta to refineries on the Gulf of Mexico.

The Keystone XL project, which was estimated to create thousands of U.S. jobs, became an election-year lightning rod, embroiling [President Obama](http://abcnews.go.com/blogs/politics/2011/11/obama-to-be-involved-in-keystone-xl-pipeline-decision/), congressional Republicans, labor unions and interest groups in a heated debate over jobs and the environment.

The State Department, which holds the authority to approve or reject pipelines that cross an international boundary, said in November that it would [delay a decision](http://abcnews.go.com/blogs/politics/2011/11/obama-administration-delays-keystone-xl-pipeline-12-18-months-punts-past-election/) on Keystone to allow for further study of the environmental impact along its 1,700-mile route.

Then in December, Congress tried to [force the president](http://abcnews.go.com/blogs/politics/2011/12/obama-rejects-gop-bid-to-tie-payroll-tax-cut-to-keystone-pipeline-approval/) to make a decision proposal within two months, tucking the mandate into the payroll tax cut bill that Obama ultimately signed into law.

But the president said today in a statement that the congressionally imposed deadline did not provide adequate time for the State Department to finish a customary review of the pipeline's route through six states.

"The rushed and arbitrary deadline insisted on by Congressional Republicans prevented a full assessment of the pipeline's impact, especially the health and safety of the American people, as well as our environment," Obama said.

"As a result, the secretary of state has recommended that the application be denied. And after reviewing the State Department's report, I agree."

Administration officials say the decision effectively hits the reset button on a review process that has been underway for several years, but does not preclude TransCanada from resubmitting a proposal for reconsideration.

"While we are disappointed, TransCanada remains fully committed to the construction of Keystone XL," TransCanada president and CEO Russ Girling said in a statement.

"Plans are already underway on a number of fronts to largely maintain the construction schedule of the project. We will re-apply for a Presidential Permit and expect a new application would be processed in an expedited manner to allow for an in-service date of late 2014," he said.

Labor unions, oil industry groups -- even the president's jobs council -- have signaled support for the plan, which also has bipartisan backing on Capitol Hill. But environmental groups warned it would have a dangerous effect on ecosystems and human health, ratcheting up pressure on Obama to defer to his progressive base in an election year.

"This announcement is not a judgment on the merits of the pipeline, but the arbitrary nature of a deadline that prevented the State Department from gathering the information necessary to approve the project and protect the American people," Obama said.

Still, news of the rejection quickly sparked [condemnation from members of Congress](http://abcnews.go.com/blogs/politics/2012/01/boehner-says-obamas-jobs-policies-have-made-the-economy-worse/) on both sides of the aisle.

House Speaker [John Boehner](http://abcnews.go.com/blogs/politics/2012/01/boehner-on-keystone-pipeline-president-is-selling-out-american-jobs-for-politics/)of Ohio, who has said pipeline construction would "create 100,000 new jobs," chastised the president and said delaying the deal means Canadians may [do business with China instead](http://abcnews.go.com/blogs/politics/2012/01/in-wake-of-keystone-decision-prime-minister-harper-tells-president-obama-that-canada-will-work-on-sending-oil-to-asia/).

"The president has said he'll do anything that he can to create jobs. Today that promise was broken," Boehner continued. "The president won't stand up to his political base, even in the name of creating American jobs."

Rep. Joe Donnelly, a Democrat from Indiana, said he is "very disappointed" in the Obama decision. "They are missing an opportunity to create thousands of jobs in America," he said.

House Minority Leader Nancy Pelosi defended Obama, blaming Republicans for effectively tying the administration's hands. "If the Republicans cared so much about the Keystone pipeline, they would not have narrowed the president's options by putting it on the time frame that they did," Pelosi, D-Calif., said.

Meanwhile, [environmental groups](http://abcnews.go.com/blogs/politics/2011/10/activists-protest-cozy-relationship-between-lobbyist-obama-admin-in-pipeline-emails/) claimed victory over the oil industry, which had spent millions lobbying intensely for approval of the pipeline.

"The Keystone XL fight was David versus Goliath; no one thought we could win," said Dan Moglen of Friends of the Earth. The decision shows "sustained grassroots pressure aimed at holding the president accountable to the public interest proved more powerful than all the lobbyists the oil industry could muster."

### Higher Fuel Standards

#### **Cars improving now – higher fuel standards**

Koch, USA Today, 11

(Wendy, 11-18-11, USA Today, “Obama seeks to double auto fuel economy by 2025,” <http://content.usatoday.com/communities/greenhouse/post/2011/11/obama-seeks-to-double-auto-fuel-efficiency/1#.T-4nT-ZOxJN>, accessed 7-3-12, LH)

The proposed rules say more than 80% of passenger vehicles meeting the 2025 standard will still have gasoline engines but many will be turbocharged. They say 15% will be hybrids and 3% will be powered by batteries. They say nearly40 current models already meet the 2017 standards and some such --Toyota Prius, Ford Fusion hybrid, Chevy Volt, Nissan Leaf, Honda Civic hybrid and Hyundai Sonata hybrid -- even meet the 2025 standard. "Our surveys show car buyers want better fuel standards, particularly because they want to spend less on gasoline. These standards put us on the right track toward the development of affordable, quality cars that use less gas," Shannon Baker-Branstetter, policy counsel for Consumers Union, said in a statement.

# Auto Trade-Off – Aff Answers

## Uniqueness Answers

### Not Growing – Automakers Can’t Adapt

#### **No reliable future growth – automaker suppliers**

Zack Investment Research, 6-26-12

(6-26-12, NASDAQ, “Auto Industry Stock Outlook- June 2012- Zacks Analyst Interviews,” <http://community.nasdaq.com/News/2012-06/auto-industry-stock-outlook-june-2012-zacks-analyst-interviews.aspx?storyid=151289>, accessed 7-3-12, LH)

Although automakers continue to focus on shifting their production facilities to new regions driven by cost and demand factors, developing the supplier networks remains one of the greatest challenges faced by them. Existing suppliers to automakers often lack the financial strength to expand capacity in new markets. On the other hand, auto parts suppliers are sensitive to technology transfers to local third parties, which can give rise to low-cost competitors.   
Since 1999, more than 20 of the largest global auto parts suppliers have filed for bankruptcy. The financial condition of the majority of auto market suppliers continues to deteriorate, resulting from a historically weak demand and high dependence on a shrinking number of automakers. The auto parts suppliers lack in pricing power given the enormous size and clout of their buyers (the auto makers).   
Thus, despite the government's sizable investment in the industry, it is likely that there will be auto parts suppliers who are unable to restart operations due to lack of sufficient working capital, even as automakers expand production. According to the Original Equipment Suppliers Association, 12% of the auto industry suppliers do not have sufficient working capital to support a 10%-25% expansion in production.   
High dependence on automakers makes the auto-market suppliers vulnerable to several maladies, primarily pricing pressure and production cuts. Pricing pressure from automakers constricts parts suppliers' margins. On the other hand, production cuts by automakers driven by frequent market adjustments negatively affect their operations.   
Some of the auto industry suppliers who have a high reliance on a few automakers such as General Motors, Ford, Chrysler and Volkswagen include American Axle and Manufacturing ( [AXL](http://www.nasdaq.com/symbol/axl) ), Meritor Inc. ( [MTOR](http://www.nasdaq.com/symbol/mtor) ), Goodyear Tire and Rubber Co. ( [GT](http://www.nasdaq.com/symbol/gt) ), Magna International ( [MGA](http://www.nasdaq.com/symbol/mga) ), Superior Industries ([SUP](http://www.nasdaq.com/symbol/sup) ), Tenneco Inc. ( [TEN](http://www.nasdaq.com/symbol/ten) ) and TRW Automotive ( [TRW](http://www.nasdaq.com/symbol/trw) ).   
The shift in consumer preferences in the auto market towards hi-tech, fuel-efficient and environment-friendly vehicles, such as small cars/hybrids/EVs, is another issue. Auto market suppliers are expected to quickly adapt to the new technologies by investing in research and development programs, putting heavy capital burdens on them. 

### Auto Industry Not Growing – Sales

#### **Auto industry not growing – sales decreasing**

Reuters, 6-1-12

(6-1-12, Chicago Tribune Business, “May sales show slowdown for auto industry,” <http://articles.chicagotribune.com/2012-06-01/business/chi-chrysler-us-newcar-sales-up-30-in-may-miss-estimates-20120601_1_colin-langan-auto-sales-annual-sales-rate>, accessed 7-3-12, LH)

Disappointing U.S. [auto](http://articles.chicagotribune.com/2012-06-01/business/chi-chrysler-us-newcar-sales-up-30-in-may-miss-estimates-20120601_1_colin-langan-auto-sales-annual-sales-rate) sales in May from General Motors Co., Toyota Motor Corp. and Chrysler Group LCC suggested industry demand slowed from the strong pace of the first four months.

The weaker-than-expected sales, which included mixed results from Ford Motor Co, were a bad sign when combined with an anemic U.S. jobs report on Friday.

"Since our last monthly sales call over the last 30 days or so, the [economic indicators](http://articles.chicagotribune.com/2012-06-01/business/chi-chrysler-us-newcar-sales-up-30-in-may-miss-estimates-20120601_1_colin-langan-auto-sales-annual-sales-rate) came in just a little softer than in the first quarter," Ford senior economist Jenny Lin said on a conference call.

GM's sales rose 11 percent, while U.S. May sales at Chrysler and Toyota rose 30 percent and 87 percent, respectively, but all fell short of expectations. Ford's sales rose almost 13 percent, which was below what Barclays and Edmunds.com expected but better than other estimates.

[Nissan](http://articles.chicagotribune.com/2012-06-01/business/chi-chrysler-us-newcar-sales-up-30-in-may-miss-estimates-20120601_1_colin-langan-auto-sales-annual-sales-rate) Motor Co. sales rose 21 percent, but the total at the Japanese automaker also fell short of expectations.

Economists polled by Thomson Reuters expect an annual sales rate for the month of 14.5 million vehicles. The rate topped 14 million in each of the first four months of the year, including 15.1 million in February.

Some industry officials expect the May rate to be lower as warmer weather earlier in the year pulled demand forward. In addition, falling prices at the fuel pump have reduced pressure on consumers to get rid of gas-guzzlers and buy more fuel-efficient cars.

GM said it expects the May light-vehicle selling rate to finish around 14 million, while Ford forecast a final number, including medium and [heavy-duty trucks](http://articles.chicagotribune.com/2012-06-01/business/chi-chrysler-us-newcar-sales-up-30-in-may-miss-estimates-20120601_1_colin-langan-auto-sales-annual-sales-rate), in the mid-14 million range. Medium and heavy-duty trucks typically account for about 300,000 sales annually.

Auto sales have been one of the bright spots in the economy for several months and the monthly sales results offer an early snapshot of consumer demand.

Sales have shot up this year despite cooling consumer confidence and mixed economic data that illustrates how shaky the recovery has been the last three years. On Friday, the U.S. Labor Department reported job growth in May that was the weakest in a year, and employers added far fewer jobs in the prior two months than previously reported.

"During any recovery you see some signals pointing upward, some neutral, some down," said Jonathan Browning, head of Volkswagen AG's U.S. operations. "While there'll be some short-term fluctuations in those indicators, those underlying trends remain in a positive direction."

One factor fueling the growth in auto sales has been Americans' increasing need to replace their aging cars and trucks, which are now a record 10.8 years old on average.

Higher fuel prices in the first quarter prompted some consumers to swap older, less fuel-efficient models to lock in fuel savings. According to Swiss bank UBS, 63 percent of dealers said higher gasoline prices increased demand in the first quarter.

With gas prices falling again, the pace of new-car sales may moderate in the second and third quarters, but the underlying consumer appetite for new cars and trucks as a result of pent-up demand remains strong, UBS analyst Colin Langan said.

## Link Answers

### High Speed Rail

No link – high speed rail doesn’t trade off with the auto industry [Do not read if claiming a warming advantage]

Peterman, Analyst in Transportation Policy, 9

(David Randall, John Frittelli, Specialist in Transportation Policy, William J. Mallett, Specialist in Transportation Policy, 12-8-09, Congressional Research Service, “High Speed Rail (HSR) in the United States,” <http://www.fas.org/sgp/crs/misc/R40973.pdf>, p. 14-15, accessed 7-2-12, LH)

In heavily traveled and congested corridors, proponents contend that HSR will relieve highway and air traffic congestion, and, if on a separate right-of-way, may also benefit freight rail and commuter rail movements where such services share track with existing intercity passenger rail service. 34 By alleviating congestion, the notion is that HSR potentially reduces the need to pay for capacity expansions in other modes. On the question of highway congestion relief, many studies estimate that HSR will have little positive effect because most highway traffic is local and the diversion of intercity trips from highway to rail will be small. In a study of HSR published in 1997, the Federal Railroad Administration (FRA) estimated that in most cases rail improvements would divert only 3%-6% of intercity automobile trips. FRA noted that corridors with short average trip lengths, those under 150 miles, showed the lowest diversion rates. 35 The U.S. Department of Transportation’s Inspector General (IG) found much the same thing in a more recent analysis of HSR in the Northeast Corridor. The IG examined two scenarios: Scenario 1 involved cutting rail trip times from Boston to New York from 3 ½ hours to 3 hours and from New York to Washington from 3 hours to 2 ½; Scenario 2 involved cutting trip times on both legs by another ½ hour over scenario 1. In both scenarios, the IG found that the improvements reduced automobile ridership along the NEC by less than 1%. 36 The IG noted “automobile travel differs from air or rail travel in that it generally involves door-to-door service, offers greater flexibility in time of departure, and does not require travelers to share space with strangers. Consequently, rail travel must be extremely competitive in other dimensions, such as speed or cost, to attract automobile travelers.” 37

Planners of a high speed rail link in Florida between Orlando and Tampa, a distance of about 84 miles, estimated that it would shift 11% of those driving between the two cities to the train, as well as 9% of those driving from Lakeland to either Orlando (54 miles) or Tampa (33 miles). However, because most of the traffic on the main highway linking the two cities, I-4, is not travelling between these cities, it was estimated that HSR would reduce traffic on the busiest sections of I-4 by less than 2%. 38 The final environmental impact statement for the project states that the reduction in the number of vehicles resulting from the HSR system “would not be sufficient to significantly improve the LOS [level of service] on I-4, as many segments of the roadway would still be over capacity.” 39 The estimated cost of the HSR line was $2.0 billion to $2.5 billion, 40 or $22 million to $27 million per mile.

## Internal Link Answers

### AT – Cars Key to the Economy

#### No internal link uniqueness – Auto industry will never fully recover

Smitka, Washington and Lee University Economics Professor, 4-26-12

(Michael, 4-26-12, Washington and Lee University, “The Auto Industry and the Economy,” <http://news.blogs.wlu.edu/2012/04/26/the-auto-industry-and-the-economy/>, accessed 7-3-12, LH)

But looked at from another angle, the news remains grim. Sales may be up sharply but are still 2.5 million units below the 16.3 million average pace of the previous 15 years. In the mid-2000s, the industry employed 3 million workers. Despite the recent gains, we are still more than 500,000 jobs below peak. On the employment front, the glass is not yet half full.

Will recovery add back all these jobs? On the negative side, the U.S. is now the third-largest car market, behind China and the European Union. As the BRIC countries (Brazil, Russia, India and China) and other economies grow, sales will rise and investment to assemble cars locally will increase. Over time, design and engineering jobs will follow.

We face long-term, and not just short-term, challenges as the industry continues to globalize. China, for example, is serious about electric cars. But in the face of an outcry by Congress over a failed solar panel venture, the U.S. has pulled the plug on electric vehicle startups, refusing to disburse funds for firms that have finished the engineering stage to hire the workers and buy the parts needed to commence production. If the Chinese market grows, we can expect to see technology — high-tech jobs — flow to where the money is.

It's not just batteries, either. For the first time ever, more than half of the finalists for the Automotive News PACE supplier innovation competition were based outside the U.S. As an independent judge for the competition, one firm I visited this year was Continental, a German company launching a new telematics system that will facilitate hands-free services outside the luxury segment.

The first company to adopt the system is GM — but it will be on Chevys sold in China, not in the U.S. That's where the growth is. The hardware was developed at Continental's telematics R&D center outside Chicago, but the software engineering was done in Shanghai, where the electronics "black box" is also assembled. We're a player, but with globalization, we're not as big a player as in the past.

On the flip side, there is encouraging news: BMW and Mercedes chose to base plants in the U.S. to make key global products, while Korean and Japanese assemblers and suppliers continue to move jobs here: Production follows sales, and Toyota, Honda and Nissan — the Japanese Big Three — now have full-fledged vehicle engineering capabilities in the U.S.

Given current exchange rates, we remain an attractive production base, with a wide array of suppliers and specialized engineering firms, good infrastructure, stable politics and a robust ability to overcome shocks. But the slower the recovery, the more we will see new technologies and the accompanying skilled jobs shift to where the sales are. On net, I doubt we'll ever fully recover.

### AT – Auto Industry Key to Economy

#### **Auto industry not key to the economy or national security**

Pisano, Harvard Business School Business Administration Professor & Shih, Management Practice Professor, 9

(Gary P., Willy C., July/August 2009, Harvard Business Review, “Restoring American Competitiveness,” <http://hbr.org/hbr-main/resources/pdfs/comm/fmglobal/restoring-american-competitiveness.pdf>, p. 10-11, accessed 7-5-12, LH)

Let ailing giants die. Throughout the world, governments have provided significant financial support to industrial companies struck by the economic crisis. As we were writing this article, Congress and the Obama administration were considering whether to give teetering CM more aid or let it go into bankruptcy proceedings. We oppose more support There are rare instances when companies cannot be allowed to fail because of vital national interests (national security) or systemic effects (the impact that the failure of a big player like AIC or Citigroup would have on the interconnected financial system). Auto companies don't fall into either category. Advocates of aid to the auto companies have argued that, in addition to preserving the huge number of jobs at those enterprises, a key reason to continue to prop them up is to preserve the supplier base. Lose these giants, they say, and you will lose feeder industries (machine tools, advanced metal fabrication, molding, and so on) crucial to the country's industrial base. We disagree and for two reasons believe that the potential impact on the U.S. commons has been exaggerated.

### AT – Auto Collapse Hurts Econ

#### Obama will assure an Auto Industry Bailout – no chance of industry collapse

Ahlert, The Patriot Post, 2-2-12

(Arnold, former columnist for the NY Post, 2-2-12, The Patriot Post, “Obama's Auto Bailout Lies,” <http://patriotpost.us/opinion/12481/print>, accessed 7-6-12, THW)

In what has become **part of his** general **re-election strategy**, president Barack **Obama is touting the government bailout of automakers GM and Chrysler as a great success. "The American auto industry was on the verge of collapse**. And **some politicians were willing to let it just die. We said no**," Obama told college students last week in Ann Arbor, Michigan. "We believe in the workers of this state." Yet much like other pronouncements of "fact" that come from this president, the devil is in the details, many of which don't remotely square with the reality. Much like the banks, **the auto industry was "too big to fail," and it was "saved" in exactly the same fashion: with a multi-billion dollar bailout**, courtesy of the American taxpayer.

#### No econ internal link – auto industry not key – other industries are alt causes

Lawrence, Harvard Kennedy School International Trace professor, 9

(Robert, Professor of International Trade and Investment at Harvard Kennedy School of Government and a senior fellow at the Peterson Institute for International Economics, 4-30, “Its Not Competitiveness its management,” <http://roomfordebate.blogs.nytimes.com/2009/04/30/does-the-us-need-an-auto-industry/>, accessed 7-8-12) JC

We ignore market signals at our peril. We should only produce domestically those goods and services that are globally competitive and import the goods and services that foreigners can produce better and more cheaply. The U.S. has lost its comparative advantage in large segments of electronics, apparel and footwear, and we are better off buying such products from foreigners rather than producing them at home at higher cost. This frees up domestic labor and capital to be put to more productive uses.

Foreign firms have shown that cars can be built profitably in the United States.

But this is not actually the case with automobiles. Foreign firms have shown that cars can actually be built profitably in the United States. So the key problem is not the competitiveness of the American economy in autos but rather the competitiveness of the Big Three. Poor management is the core weakness. The policy question is not whether to have domestic auto production but rather whether our policies should ensure that we have a certain amount of that production undertaken by automakers with U.S. headquarters.

## AT – Warming/Oil Dependency Impacts

### AT – Solves Warming – Cars Not Major Contributor

#### Auto industry can’t solve warming- only responsible for 17% of emissions

Lentz, Toyota, President and CEO, 9

(Jim, 11-17-09, Vital Speeches of the Day, “Cars: Enriching Our Lives, Our Economy and Our Future,” Academic Search Complete, p. 77, accessed 7-6-12, LH)

Some people believe that automobiles are the worst offenders on CO2 ... but that’s not the case.

In the United States, autos account for about 17% of allman made carbon dioxide emissions, or less than one-fifth of the total.

That’s not low enough, but it is important to understand that ... although cars and trucks are one of the most visible sources of greenhouse gases in America ... they are NOT the major contributor.

### AT – Solves Warming – No Green Cars

#### **Doesn’t solve warming – green cars won’t be widespread**

Reuters, 2-1-12

(2-1-12, The Huffington Post, “Oil Industry: Electric Cars Are No Threat,” <http://www.huffingtonpost.com/2012/02/01/oil-industry-electric-cars_n_1246432.html>, accessed 7-3-12, LH)

LONDON, Jan 29 (Reuters) - The biggest oil companies in the world have calculated that few, if any, of today's drivers will see electric cars outnumber gasoline and diesel models in their lifetimes.  
While politicians and green lobby groups insist the future of transport is electric, in the past two months BP and Exxon have released data which points to electric cars making up only 4-5 percent of all cars globally in 20-30 years.  
Meanwhile some governments are targeting as much as a 60 percent market share for electric vehicles over a similar period.  
The oil company forecasts may appear self-serving, but if they are widely accepted could provoke a policy shift that offers greater incentives for electric cars to end our addiction to oil.  
And unlike more optimistic predictions from consultants like McKinsey, these forecast are backed by cash. They guide tens of billions of dollars in long-term investment in oil production and refining and it is oil that stands to lose if they get it wrong.  
They don't, of course, take into account a major breakthrough in battery technology that could give electric cars a cost and performance edge over the internal combustion engine.  
In its Energy Outlook for 2030, released earlier this month, BP predicted that electric vehicles and plug-in hybrids, will make up only 4 percent of the global fleet of 1.6 billion commercial and passenger vehicles in 2030.  
"Oil will remain the dominant transport fuel and we expect 87 percent of transport fuel in 2030 will still be petroleum based," BP Chief Executive Bob Dudley said as he unveiled the BP statistics on January 18.  
The balance is seen coming from biofuels, natural gas and electricity.  
Plug-in hybrids can be powered from the mains and only rely on their small gasoline engines when the battery dies.  
Standard hybrids are principally driven by an internal combustion engine whose efficiency is boosted by the recycling of energy generated from braking.  
Exxon Mobil, the biggest oil and gas company in the world, says the continued high cost of electric vehicles compared to petroleum cars, means take-up won't even increase much during the 2030s.

### AT – Solves Warming – Too Many Cars

#### Preponderance of cars overwhelms – Cars contribute a large percentage of emissions

KMPG International, 10

(KPMG International is a global network of professional firms providing Audit, Advisory and Tax services, 2010, KPMG, “The Transformation

of the Automotive Industry: The Environmental Regulation Effect,” <http://www.kpmg.com/US/en/IssuesAndInsights/ArticlesPublications/Documents/transformation-automotive-industry.pdf>, p. iii, Accessed 7-8-12, THW)

Globally, road transport (passenger cars and commercial vehicles) contributes 14 percent of total man-made carbon dioxide (CO2) emissions.1 Although new cars now emit significantly less CO2, road transportation remains one of the few sectors where emissions keep rising. This is due to the growth of freight transportation, vehicle ownership, and increased mileage. In the European Union (EU), for example, motorists increased their annual mileage by 16.4 percent between 1995 and 2003. For conventional vehicles, only 15 percent of the energy from fuel put in the tank is used to move the vehicle with the rest wasted in friction losses.2 This suggests that tremendous opportunities still exist to improve fuel economy.

### AT – Solves Green Tech – Oil Companies Prevent Solvency

#### **Oil companies stop green technology – empirics on our side**

Diamond, Student Pulse, 11

(Regina L., 2011, Student Pulse, “Big Oil’s Stranglehold on America,” [http://www.studentpulse.com/articles/353/big-oils-stranglehold-on-america#](http://www.studentpulse.com/articles/353/big-oils-stranglehold-on-america), accessed 7-3-12, LH)

Big oil’s ruthless supply and demand tactics have monopolized the entire energy industry by shredding competitors’ attempts to offer alternatives. Consumers are thus forced to surrender their right to choose due to the aggressive techniques being used by the oil industry to prevent the use of clean energy. Unfortunately, the American government has historically sided with the oil tycoons. In the movie Who Killed the Electric Car the executive director for Energy and Climate Solutions, Joseph J. Romm accurately declares, “There’s no question that the people who control the marketplace today, the oil companies, have a strong incentive to discourage alternatives except the alternatives that they themselves control.” This seems rather unfair considering the alarming amount of evidence that shows the ill effects the use and production of fossil fuels cause to the environment. The ideal solution would be to replace oil with one of the safer alternatives that have been introduced into the markets over the past forty years; however, the American economy, being driven by capitalism and big oil interests, has protected the status quo and prevented change from occurring. There is a significant need to revise the profit motive as it pertains to energy and the environment. Presently, the oil industry controls the environmental future of America, which does not bode well for the future.

Over the past forty years there have been several notable attempts to revolutionize technology, all of which have been stomped into the ground by the oil industry. The first occurred in 1985 when Ronald Reagan tore down the solar panels from the roof of the White House. The incident and the events surrounding it were documented in Joshua Green’s essay, “Better Luck This Time.” In “The Specter Haunting Alaska” Peter Canby tells of another win for the oil industry. Canby gives details on Donald Hodel’s decision to drill in Alaska despite explicit warnings from environmentalists of disastrous results for the environment. Most recently, the California Air and Resource Board made an attempt to soften the blow that the oil industry is taking on the atmosphere. They passed the Zero Emissions Vehicle Mandate in1990, which stated that each year car manufacturers were required to produce a small percentage of vehicles that did not produce harmful emissions. This effort by the auto industry to infiltrate the use of electric vehicles was stopped by the oil industry but not without the help of the United States government. This disturbing occurrence was documented in the movie Who Killed the Electric Car. It is absolutely necessary for a major revision to take place in order for the environment to have any chance at survival. These attempts were made by influential people, over the past four decades, yet still remain unsuccessful, suggesting that there is little hope for the environment.

### AT – Solves Oil Dependency

#### No near term solvency – industry oil dependence overwhelms

Oil Today, Oil news report, 12

[Oil Today, “North Sea Oil in Brief,” 6-12 <http://www.oiltoday.co.uk/2012/06/12/an-artificiality-at-its-best/>, accessed 7-8-12) JC]

Firstly, it is the question of how dependent are we on oil. As a matter of fact, oil consists of nearly 75% of the world’s energy reserves and supplies and its constant demand increases by the second. It has been estimated that every 9 out of 10 cars in the western world relies heavily on oil and the car industry in the US produces some of the most oil-unfriendly vehicles with huge demand for fuel. Logically, yes we depend on oil far too heavily and accordingly we need a lot of it to consume on short demand. But why is this so and have our governments and corporations taken actual care to reduce the impact of the oil dependency?

The chart above displays the automotive industry developments in the last few months. The chart indicates the planned concepts for 2016. Therefore, we can see that manufacturers will still rely heavily on oil in the years to come and many of the car concepts developed and to be released in 2016 will be oil fuelled. Obviously, this is an indication of some concerns – if oil is reducing in quantity and is increasing in demand, how are the automotive industries going to offer sustainable products to the public. Apparently the car market will be supported mainly by the ones who can afford above the average life style.

### AT – Green Tech Solves Energy Efficiency/Emissions

#### No solvency – green tech doesn’t reduce emissions

Thompson, Live Science, 7

[Andrea, Live Science, “Technology Won’t stop Global Warming, Economists Say,” 11-19-7 <http://www.livescience.com/4722-technology-won-stop-global-warming-economists.html>, accessed 7-8-12) JC

Despite many technological advances in the past half-century, the rates of growth of energy use and of greenhouse gas emissions have continued to rise (by about 2.2 and 1.6 percent per year respectively), despite the rising costs of energy, Richard Eckaus of MIT and Ian Sue Wing of Boston University found in a new study.

"We found that, in spite of increasing energy prices, technological change has not been responsible for much reduction in energy use, and that it may have had the reverse effect," Eckaus said.

In the new study, funded by the U.S. Department of Energy and the Harvard Kennedy School of Government in Massachusetts, Eckaus and Sue Wing examined the periods of 1958 to 1996 and 1980 to 1996 and then used computer models to project changes in the growth rates of both energy use and emissions from 2000 to 2050. Their findings, detailed in the November issue of the journal Energy Policy, showed that these rates may accelerate.

"The rates of growth could be higher by a half percent or more, which becomes significant when compounded over 50 years**,**" Eckaus said.

The Intergovernmental Panel on Climate Change released a report this weekend that warned of the hazards that rising carbon dioxide levels will cause, noting that even if reductions are made, certain effects, such as sea level rise, will still occur.

Technological advances may not be a fix even though they have been looked to as a source of curbing emissions of carbon dioxide and other greenhouse gases, Eckaus said, citing the U.S. steelmaking industry as an example.

Though steelmakers' furnaces are now electrical, reducing coal use at the steel plant, some of the electricity that powers the furnaces is still generated by coal, resulting in more carbon dioxide emissions.

Instead of relying on technology to solve the global warming problem, governments should make energy more expensive, Eckaus advises.

"There is no 'a priori' reason to think technology has the potential for reducing energy use while meeting the tests of economics," he said. "It's politically unappetizing in the U.S., but in Europe, gas costs $6 a gallon. Make energy more expensive: People will use less of it."