



CSCMP'S ANNUAL
STATE OF LOGISTICS REPORT®

PRESENTED BY

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CSCMP'S ANNUAL

STATE OF LOGISTICS REPORT[®]

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22nd Annual State of Logistics Report[®]

Navigating Through the Recovery

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Introduction

The cost of the U.S. business logistics system jumped up 10.4 percent in 2010, making up more than half of last year's decline (*Slide 1*). Business logistics costs rose to \$1.2 trillion, an increase of \$114 billion from 2009. This puts 2010 about on par with 2005, and still well below the pre-recession years. In 2010, logistics costs as a percent of the nominal Gross Domestic Product (GDP) climbed back up to 8.3 percent.

Both major components of the logistics cost model increased by slightly over 10 percent in 2010. Inventory carrying costs increased 10.3 percent in 2010 (*Slide 2*). The increase in carrying costs was due to higher costs for taxes, obsolescence, depreciation, and insurance, which were offset by a further drop in the inventory carrying rate and warehousing costs. Transportation costs were up 10.3 percent from 2009 levels. Trucking, which comprises 78 percent of the transportation component, continued to lag behind the performance of other modes, rising only 9.3 percent compared to an average of 15.4 percent for the other modes combined.

2010 was certainly a better year than 2009, but did not turn out to be all we had hoped it would be. The recovery from the Great Recession has proven to be more elusive and prolonged than any other in our history. The slow growth presented another year of challenges for the logistics industry. Volumes firmed up early in the year, but dropped off in the second half. Demand for capacity began to equalize with available capacity in many sectors, but rates continued to be constrained. Inventories began to climb again and retailers pulled back on their ordering, because spending did not expand as expected. The economy began to falter in the second half of the year as the contribution from the various stimulus packages put in place to jumpstart and fuel the first year of the recovery faded. Or to put it another way, "The recovery remains distinctly subpar," according to New York Federal Reserve Bank President William Dudley.

Consumers are not leading the charge as they have in other recoveries because of the fragile state of the economy and their personal wealth. Unemployment is still pervasive, new jobs are being created at a rate that does not even cover population growth, the housing market has not rebounded in most areas, foreclosures continue, and home

prices are still deflated, and fuel and food prices have been steadily rising. Personal net worth plummeted for most people, causing them to adjust their view of the economy and their spending patterns. In the three years prior to the recession the personal savings rate in the U.S. averaged 1.9 percent, in line with a steady decline over the last twenty years. Since the beginning of 2008 and through 2010 the personal savings rate has averaged 5.3 percent, which is still significantly lower than the 9 to 10 percent average before 1990. Consumer spending and retail sales grew modestly in 2010, not igniting as expected. Most of the increase in retail sales was sales of fuel, automobiles, and food.

Manufacturing and business spending were the bright spots during much of 2010. Industrial Production was up 5.3 percent in 2010, after declining 11.2 percent the year before. Industrial production and manufacturing for businesses was up, while consumer goods production was almost flat. Capacity Utilization increased from 69.2 percent in 2009 to 74.5 percent in 2010. Consumer spending and retail sales grew modestly. These were all signs that the economy was strengthening, but by mid-year there was a slowdown and the economy never fully reached that level of momentum again. There were some encouraging success stories. For instance, the auto industry is rebounding and strengthening – recently Chrysler paid off its TARP loans, seven years ahead of the due date.

Given the weather conditions in most of the country at the start of 2011, most measures would call the first quarter a strong quarter for the logistics industry. In the last few months volumes have been eroding, along with other key economic indicators. There are signs that the economy is stalling and predictions for a strong showing in 2011 may fall short. This will be addressed at the end of the presentation, so let's get back to 2010.

The Business Logistics System—2010

Total logistics costs rose 10.4 percent after tumbling in both 2008 and 2009. Transportation costs are up over 10 percent in 2010 because of higher freight volumes, fuel surcharges, and for some modes, genuine rate hikes. Interest rates dropped still

more while inventory levels inched back up, and lower warehouse costs were more than offset by increases in other inventory related costs, such as insurance, depreciation, taxes and obsolescence, resulting in a 10.3 percent gain in inventory carrying costs. Logistics as a percent of our nominal GDP moved back up to 8.3 percent, still lower than any year but 2009 in the last decade **(Slide 3)**.

[Note: A number of the government series used throughout this report have undergone revisions to incorporate new or more recent survey data. The updates affected GDP, Industrial Production, employment figures, etc. Full explanations of the nature and impact of the revisions can be found online at the data source.]

Freight volumes grew year over year, but unsteadily. There were frequent spikes and valleys in the monthly tonnage, carload, and intermodal and container data. Capacity, both equipment and labor, was able to meet the needs of the returning traffic, but came close to reaching the equilibrium point. Volumes have only recovered about half the recession losses, yet industry capacity, particularly in truck and air, is close to being fully engaged. The recession had a devastating effect on total industry capacity, which is much lower than it was in 2007. The recovery is not being felt evenly throughout the economy and 2010 did little to shore up precarious carriers who have been hanging on hoping to be rescued by a resurgence in the economy.

All business inventories increased in all quarters, except the second, which experienced a slight dip. By the third quarter, inventory levels were heading back into the levels that were experienced at the start of the recession, ending the year at the highest point since third quarter 2008. The average investment in all business inventories (agriculture, mining, construction, services, manufacturing, wholesale, and retail trade) increased to almost \$2.1 trillion in 2010, a jump of \$199 billion **(Slide 4)**. Stock was replenished in the first quarter. Mounting inventories caused some retailers to put off orders to sell down merchandise in the second quarter. Sales outlooks for the holiday season were encouraging and orders were placed, but the stocks did not move and in the last half of the year inventories climbed \$170 billion dollars. Holiday shopping volumes were reportedly higher than in 2009, but final sales figures showed

that people weren't buying as much as anticipated. Many waited until late in the season to buy to take advantage of discounted merchandise.

The inventory-to-sales ratio skyrocketed during the recession, from 1.26 in late 2007 to 1.48 in early 2009, mirroring the steep rise in inventories as sales dropped off. After clearing out inventories and maintaining stock levels that more closely matched sales the ratio had returned to 1.27 at the end of 2009. During 2010, the ratio generally hovered in that neighborhood, and ended the year at 1.25 *(Slide 5)*. The erratic behavior in the line shown in the graph demonstrates the ups and downs we are still experiencing on the bumpy road to full recovery.

We continue to see consumer purchases skewed toward lower priced and discounted goods. Package sizing has been shrinking for numerous products without a corresponding drop in price. This is one way manufacturers have coped with rising material costs and a weak market to absorb price hikes. Retailers have acknowledged that consumers are being more disciplined and focusing on needs, rather than wants.

Manufacturers and their suppliers continued to follow very lean order and inventory practices in 2010. Very little in the way of safety stock are stored anywhere in the system, so there have been more stories about plants having to slow or shut down because a supplier was unable to come up with the part or materials when it was needed. I feel confident that the industry will solve the issues and make a leap forward in inventory management as we have done when faced with other seemingly insurmountable problem.

The cost of carrying inventory is determined not only by the value of private inventories, but also the interest rate for holding those inventories. The annualized commercial paper rate from the Federal Reserve is used for the interest component in the SOL model. The annualized rate fell again to .20 percent in 2010, from .26 percent in 2009 *(Slide 6)*. The result of higher inventories and historically low interest rates is a 15.9 percent drop in the interest component of carrying costs.

Taxes, obsolescence, depreciation, and insurance rose 15.4 percent in 2010. The insurance market remained quite soft in 2010 with new entrants into the market helping to hold rates steady or even slightly down. Taxes, depreciation, and obsolescence on the other hand were up substantially because of the higher inventory levels.

The cost of warehousing fell 6 percent in 2010. There was a lot of excess capacity in the commercial warehousing and distribution sector and this contributed to aggressive pricing to attract tenants. As inventory levels rose throughout 2010 the cost to acquire extra space did not increase correspondingly. The trend has been to optimize transportation and distribution patterns to minimize the number of facilities used. The average size of distribution centers is more than double that of just ten years ago.

Transportation costs went up 10.5 percent in 2010 *(Slide 7)*. Carrier revenues, which are used to measure the cost to shippers, were up in 2010 ranging from a 6.4 percent rise in pipeline revenues to a 21.8 percent surge in railroad revenues. This was a welcome turnaround from the losses in 2009. Most of the laid up capacity has been returned to the market, with the notable exception of ocean carriers. They took delivery of many mega containerhips over the last year and a half that basically doubled the industry's capacity.

Trucking, the largest component of the transportation sector, remains the hardest hit mode, struggling to cover costs, especially skyrocketing fuel costs. The cost for trucking was up 9.3 percent in 2010, with the intercity truck segment up 9.5 percent and the local delivery segment up 8.8 percent. Much of the increase in revenue is from fuel surcharges, even though most truckers have not been able to fully recover their actual added fuel costs. Volumes grew slowly and fitfully, with truck tonnage rising 5.7 percent in 2010, not even close to reversing the losses of the last several years. *(Slide 8)* In general, there was still more available capacity than needed to meet demand for most of the year, so trucking companies did not gain ground in the rate department.

Total industry capacity has suffered during the economic downturn, with more than 16 percent of truck capacity permanently removed since 2006. Traffic levels are expected to rebound faster than the sector will be able to respond and expand capacity. The

number of tractors has declined 9.8 percent in the last two years. Truck orders picked up at the end of the year, a good indicator that carriers had high expectations for 2011, but the level of sales actually does not even cover the normal replacement levels. Trucking companies have been holding on to their fleet a little longer or scrapping vehicles without replacing them immediately because of the high initial cost (truck prices have jumped 25 percent in the past five years) and increased life cycle costs associated with new Class 8 tractors and still tight credit markets make the investment more difficult. More than 3,000 trucking firms have declared bankruptcy in the last three years, a loss of 13 percent of industry capacity, according to Donald Broughton of Avondale Partners. This includes only carriers with at least 5 trucks, so the number is actually much higher.

The trucking sector has also experienced the largest decrease in employees in the industry, with a loss of 13.4 percent of the workforce over the last four years. Trucking's payroll rose only 1.5 percent in 2010, but is expected to rise more steeply in 2011. Drivers will become a limiting factor in truck capacity, slowing the return of trucks to the marketplace. Driver pay will rise as well as companies work to attract and retain drivers – some, like Conway, have even opened their own driving school and training program to ensure they have top quality drivers. Industry turnover rates are spiking because drivers are changing companies to chase better pay, benefits and working conditions (*Slide 9*). The truck freight volume is now rising faster than new drivers are being added to fleets. CK Commercial Vehicle Research's recently released Fleet Sentiment Report, a survey of small, medium and large for-hire, private and government fleet operators, showed that 42 percent of the fleets surveyed are having problems now with current seats empty and limits on the number of new units that can be added for new capacity. Another 32 percent stated that they are not experiencing problems now but believe the driver shortage will impact their fleet later this year. The long term demographics for drivers are not encouraging either (*Slide 10*). About one in six truck drivers is age 55 years or older. Less than one quarter of current drivers is under 35 and that segment has been declining. Apparently attracting drivers has been a challenge since motorized vehicles replaced horse and cart for the movement of freight.

The cost for rail transportation soared 21.8 percent in 2010, making up the ground lost in last year's 20 percent decline (*Slide 11*). The 7.3 percent increase in carloads and 14.2 percent increase in intermodal volume in 2010 over 2009 are the largest annual percentage increases since 1988, the earliest year for which we have comparable data. The increases in 2010 followed the largest annual percentage declines in history the year before, when carloads were down more than 16 percent and intermodal traffic was down more than 14 percent. U.S. railroads have recovered some lost ground, but not nearly all of it. Revenue rose steeply, as the railroads had success in 2010 raising rates and having them stick. Further proof of their improved performance is revenue per ton-mile rose from 2.84 to 3.33 cents per ton-mile.

With respect to capacity, railroads are in very good shape from an infrastructure, equipment and personnel basis. Class I railroads continued to invest in new capital projects throughout the recession. Since the recovery started much of the sidelined equipment and staff have been returned to active service. During 2010 132,284 rail cars were returned to service, leaving 316,271 cars, or 20.8 percent of the fleet, on the sidelines. Just for comparison, the Association of American Railroads has indicated that during normal good times only about 2 to 3 percent of the fleet would be sidelined.

Costs for the water sector went up 14.1 percent in 2010 (*Slide 12*). Traffic through the nation's ports contracted again in 2010, even though all top ten ports (except Tacoma) registered a rise in TEUs moved. The ocean carrier sector has not yet recovered from its disastrous showing during the recession. Over capacity continues to be the single biggest issue. Throughout 2009 and 2010 the sector took delivery of mega containerships that had been ordered prior to the downturn. The new vessels came close to doubling the available capacity in the sector.

Rates for ocean shipping rose significantly over 2009 rates and held until about August. At that point the excess capacity and weakening demand prompted some carriers to try to increase their market share by offering lower spot rates in the trans-Pacific trades. Spot rates have dropped 40 to 50 percent over the final quarter of 2010 and the first couple of months of 2011. Drewery Shipping Consultants reports that on-time performance was only marginally better in 2010.

Tonnage on the inland waterways rose sharply in the first quarter of 2010 and then again in May and October, but remained fairly flat for the rest of the year. Rates have not been very robust for this sector, although they were up from 2009. *(Slide 13)* The Army Corps of Engineer's Monthly Tonnage Indicator shows that in 2010, tonnage surpassed 2009 levels, but rarely got above the peaks in 2009.

Revenue ton-miles carried on the Great Lakes posted a strong 33.4 percent gain. Most of the increase came from shipments of iron ore. Due to a strong rebound in steel production, iron ore cargos rose 75 percent to 42 million tons, Coal and limestone shipments edged up, while the continued sluggishness in the construction industry dampened demand for cement. The severity of the preceding winter sets the pace for the salt trade, and 2009 was not a bad year so sand shipment volume declined. No carriers were forced out of business in 2010. Shipments of the major dry-bulk cargos in vessels of all flags totaled 138.1 million net tons, an increase of 23.3 percent compared to 2009, but this is still well below the five year running average, indicating that the sector has not fully recovered.

Oil pipeline volumes were up slightly in 2010. This combined with a small rate adjustment to push pipeline revenue up 6.4 percent.

Air freight revenue rose 11.2 percent in 2010. The first half of 2010 was great for the air cargo industry. Firms were still waiting to see before placing orders and were willing to pay for the upgraded service. By mid-year even specialized technology items were back to being moved on ships. During the downturn many carriers decommissioned aircraft and removed them from their fleets, reducing fleet capacity by 12 percent.

Freight forwarders fared well until about half way through 2010, when they struggled along with the rest of the industry. Non-asset providers tend to be better off during period of slowdown, and forwarders rose 15.4 percent. Shipper related costs rose 2 percent and logistics administration increased 10.4 percent.

Here is how the performance of our business logistics system looks for the last two decades, between 1990 and 2010 **(Slide 14)**. Inventory carrying costs as a percentage of GDP declined about 45 percent in the last twenty years. Transportation costs as a percentage of GDP is 13 percent lower than it was twenty years ago, but most of that drop is in 2009. As I said last year, I expect the downward trend to reverse and to return to where we were before the recession.

GDP was up in 2010, but logistics costs grew even more **(Slide 15)**. Looking at the numbers we see that the growth in logistics cost has outpaced the growth in GDP prior to the recession and has returned to that pattern. I expect logistics costs to grow faster than GDP for the next several years.

Looking Ahead

If 2010 had turned out more robust, or I was hearing more reports of tight capacity, I would not be second guessing the analysis I did just a month ago for this report. Based on the first quarter, I was optimistic about 2011. In fact, I prepared forecasts with the economy flourishing and we finding ourselves pressed for capacity, paying more to ship, and taking some more hits on reliability as we settled into our leaner logistics system. But now that I have seen five full months of data for 2011, read other experts analysis and forecasts over the last few weeks, it appears that the economy is stalling. This seems a little stronger than the bumps in the road we have experience to date. Key indicators show that the economy is beginning to unravel in some sectors. Last week an analyst I follow wondered aloud whether the recovery was temporary, not whether the latest downturn was. The economy has been in a fragile state for close to four years now and the highly touted recovery in some sectors has not generated enough momentum to cascade into other less robust sectors. **(Slide 16)** After the most recent round of data releases, especially the disheartening rise in unemployment and drop off in freight volumes, many analysts are revising their growth expectations downward. I too have watched this situation developing over the last two months and have concluded that we may have hit a wall. It has been close to two years since the recession was pronounced over and for many Americans things have not improved.

Focusing on the logistics sector, despite the ups and downs in 2010 balance between supply and demand reached equilibrium by the end of 2010, ending the over capacity problems in the trucking industry. As volumes grew the balance has been shifting slowly in favor of carriers. Freight carriers enjoyed increased revenues, although a major portion of that was fuel surcharges, and profits were reported by many carriers during the first quarter of 2011 (*Slide 17*). Capacity issues are becoming more widespread in the trucking and air sectors. Attrition is still eliminating industry capacity, but at a much slower rate than we saw in 2009 and 2010. ACT Research recently projected a shortfall of 75,000 trucks by first quarter 2012, climbing to 180,000 units by the end of 2012. Truck sales are and new orders are making headlines, but the reported level of sales really doesn't meet traditional replacement levels. Truck manufacturers are producing about 300,000 units per year. They too are also struggling with capacity issues, because their sources for assembly parts have been unwilling to carry big inventories or manufacture parts ahead of orders and often find the same behavior in their suppliers. The rapid expansion of the truck fleet will be hampered by manufacturing constraints just as much as by tight credit or lack of funds for capital investments.

Rates are inching up, but so far the numbers do not support the anecdotal evidence collected. Freight spend is generally higher today than a year ago, but higher shipment volumes and higher fuel surcharges account for most of the increase. We went into the recession with a driver shortage and with capacity constraints, and we're going to come out with an exacerbated driver shortage and a more severe capacity crunch. Until tight capacity builds, and is more universal, shippers will continue to get away with holding tight to their current rates or searching for more favorable rates in the spot market. Capacity available on load boards has spiked in recent weeks, indicating that more carriers are chasing loads again. Between much reduced industry truck capacity and a soon to be critical driver shortage, this would be the time to be building or mending relationships with your trucking firms. It is going to be all about relationships and carriers having the luxury of choosing who they do business with. Trucking companies are becoming more selective about the shippers they choose to haul freight for and this will become a more common practice. Improve the way you treat drivers – wait time,

facilities, etc. They are about to become a very valuable scarce resource! The key now is figuring out when will we begin to feel the pain.

There is another level of uncertainty that has been introduced into the mix in the form of new regulations *(Slide 18)*. The Federal Motor Carrier Safety Administration introduced CSA last year to replace Safe Stat as the new yardstick for safety measurement. CSA will have an impact on the industry capacity and operating costs, but it's still a moving target. Basically, instead of a carrier receiving an overall rating of conditional, safe, or unconditional, carriers will now be rated on seven so-called "basics." Six of those will be visible to the public, and one will not. So, for all intents and purposes, we're talking about six basics. A carrier will receive a rating in each of those basics, so that will be a fundamental change. *(Slide 19)* The obvious effect is increased cost to do business to bring vehicles and drivers up to standard. A secondary effect will be a winnowing out of marginal and unsafe carriers and drivers, which will further shrink available truck capacity. I have already seen some fallout for companies with high scores, high equals bad.

Shippers are concerned about the liability issues they face hiring a marginal carrier over one with a better record and have dropped carriers in favor of a carrier with better scores. The liability risk is real. Easy access to CSA scores will build an even stronger case for shipper culpability.

On the flip side truck fleet owners are purging high risk drivers from their driver pool using the driver's CSA score. Drivers with poor safety records adversely affect the company's rating. Drumming out unsafe drivers will further shrink the available driver pool. Expect CSA to impact driver pay, as drivers with excellent records will be able to command higher pay.

Other concerns on the horizon for truckers are the new hours of service rule that will also reduce capacity by cutting the productivity of individual drivers. There are also myriad new concerns about the quality of the rest period and sleep apnea. Electronic on board recorders (EOBRs) will be mandatory for some fleets with a history of hours of service violations. Many larger fleets are installing them as part of the package of

electronic devices they use to monitor and improve the efficiency of their fleet and drivers. Recently the U.S. and Mexico reached an agreement to reopen the border to trucks from each country to make deliveries deep into the other's nation. On the U.S. side, there will be a pilot program to ensure that the Mexican trucks meet all of the U.S. truck and driver safety and inspection regulations. Use of EOBRs is mandatory for any Mexican truck operating in the U.S.

Motor Carriers are being set up for the perfect storm...capacity is still leaving the market; drivers are difficult to find and keep, the truck order backlog is growing, operating costs are rising while revenues are steady, and new regulations are on the way that will reduce the productivity of the drivers and trucks they do have. Couple this with rising freight volumes and the trucking sector could find itself unable to meet demand.

Railroads did quite well in the first quarter of 2011, but have been experiencing lower freight levels in the second quarter. **(Slide 20)** Intermodal has been a high performing segment for well over a year. As capacity continues to tighten, freight has an escape valve - intermodal is an option for growth and to relieve pressure. The railroad sector is poised and ready to take on more traffic. Significant investment has been made to upgrade tracks and facilities, such as transload terminals. New locomotives and cars have been ordered and the railroads have been hiring and training new personnel. Both railroads and ocean carriers have decided to divest themselves of container chassis and will be moving to a model in which they do not provide the chassis for a customer. During the transition to private chassis holding companies there could be some higher costs associated with developing new procedures and pipelines.

Air carriers have seen their business dwindle during the first half of 2011 **(Slide 21)**, but that was not unexpected. Their customers are faced with higher transportation costs and are opting to go with cheaper options when the can. Air cargo operators do have plans to add much more capacity in 2011. Demand for air cargo is expected to be slow in the remainder of 2011.

Excess vessel capacity will be an issue for ocean carriers for the next several years. New container ships are being added to the fleet every month. The trans-Pacific trade vessel capacity will increase 25 percent, pushing utilization ratios down to 87.5 for eastbound rates and 46.1 for the westbound leg. Although carriers were strong and resolved to making the higher rates stick for well over a year, now they are more interested in gaining market share than protecting their revenue. Drewry Shipping Consultants forecasts that many ocean carriers will struggle to break even this year.

Now let's look at the ugly details in the most recent reports that show how vulnerable the recovery is and the impact it is having on logistics. The first quarter 2011 GDP growth rate was revised downward in the latest release, with preliminary estimates from coming in at just 1.8 percent, well short of the 3.1 percent expectations. Consumer spending was revised downward hitting a six month low and inventories climbed higher. The current economic picture is not indicative of a strong recovery; in fact it appears that the recovery is losing momentum. Originally robust estimates for second quarter GDP have been cut dramatically to between 2.5 and 3 percent.

Unemployment is on the rise again, reaching 9.1 percent, while hiring has fallen off. The manufacturing sector has been responsible for much of the growth in new jobs, but in May it cut 5,000 jobs. The Institute for Supply Management's index of manufacturing activity fell to 53.5 in May from 60.4 in April, much lower than the 57.1 level that had been forecast. New orders and production plummeted, as supply chain disruptions from the March earthquake and tsunami in Japan affected automobile and other production. May showed the slowest rate of expansion in the nation's factories since September 2009.

The public sector continues to shed jobs as budgets are chopped. A monthly survey by ADP, the payroll processing company, showed a sharp decline in the rate of job creation at private businesses - firms added only 38,000 jobs in May, compared with 179,000 jobs added in April. Also the number of people filing new claims for unemployment insurance benefits is on the rise again. Pervasive unemployment undercuts GDP growth by reducing consumer demand, which in turn makes it harder to create jobs. It used to take six months for the employment situation to get back to normal after a recession, this time around and Federal Reserve Board Chairman has

said that he expects it could take as long as five years to get back to a pre-recession level of unemployment. Even this seems optimistic, since about 187,000 jobs a month would need to be created, to get to a healthy 5% unemployment rate by 2020. At the current rate of growth and job creation, we would maybe get halfway there by that time.

The S&P housing price index dropped below the April 2009 low because of the glut of houses for sale, foreclosures, tight credit, and weak demand. The performance of the housing market is reminiscent of the situation after the Great Depression. David Blitzer, chairman of the S&P index committee reported that "This month's report is marked by the confirmation of a double-dip in home prices across much of the nation...Home prices continue on their downward spiral with no relief in sight."

Households lost \$16.4 trillion of net worth from the peak during the Great Recession **(Slide 22)** and have regained less than half the loss. Housing prices are falling again, further reducing personal wealth. A report released this week by the Federal Reserve shows that prices are up sharply for food and fuel. This recovery is very atypical of previous recoveries in the U.S. The economy has not quickly returned to previous growth levels and the present weakness suggests that we will not see that kind of growth for the remainder of this year. The Federal Reserve's latest round of economic stimulus or "quantitative easing," dubbed the QE2, ends at the end of this month. The Fed bought \$600 billion in long term treasury bonds to put an infusion of cash into the system to hold down interest rates...in other words, they created money out of thin air. The Fed has indicated that QE3 is not likely. The current stall is troubling and solutions are getting harder to find. Even Austan Goolsbee, President Obama's chief economist, is throwing in the towel and returning to the University of Chicago.

Freight shipments have been flattening since March and actually declined in May. Freight spending has also been dropping off after rising steeply for the first quarter of 2011. May's figure was almost unchanged from April, posting a meager 1.7 percent increase. Another drop in durable goods shipments and orders has flattened freight volumes, which posted a month-to-month 0.2 percent drop **(Slide 23)**. Year-over-year growth rates are dropping swiftly as well, with May freight volumes as measured by the

Cass Freight Indexes only 9.6 percent higher than a year ago, compared to April which was 12.3 percent higher than a year ago. The rail industry reported steady gains in the last half of the month, but weekly carloadings levels are well below what they were earlier this year. Truck shipments continued to fall off in May, after declining 7 percent in April. Fuel prices rose for most of the month, but posted their sharpest decline in over a year during the last week of May.

Although many industry observers are still predicting a strengthening as we head to the second half of the year, the underlying pieces are not falling into place to support anything more than weak growth. Retail sales rose in May, but were well below what had been forecast for May and lower than April's numbers. The Consumer Confidence Index dropped sharply in May from 66.0 to 60.8, reflecting consumer uncertainty and rising pessimism about inflation, their income prospects, and the housing market. This uncertainty is translating into a slowdown in purchasing. Business spending and manufacturing are declining as well. New orders and production declined in May, 10.7 and 9.8 percent respectively. The Purchasing Managers Index recorded its steepest drop since 1984, plunging 6.9 percent in May. Imports and exports are also forecast to be flat or even a little down in May. All of this translates to reduced freight volumes in the next few months.

Summary

By the end of 2011 we will be looking at a quite different-looking freight picture, unfortunately one that will be fraught with challenges for shippers and carriers alike. Which scenario will play out? It could go either way at this point, but my money is on the innovators in the logistics industry who are navigating through the recovery.

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National Press Club

Washington, DC

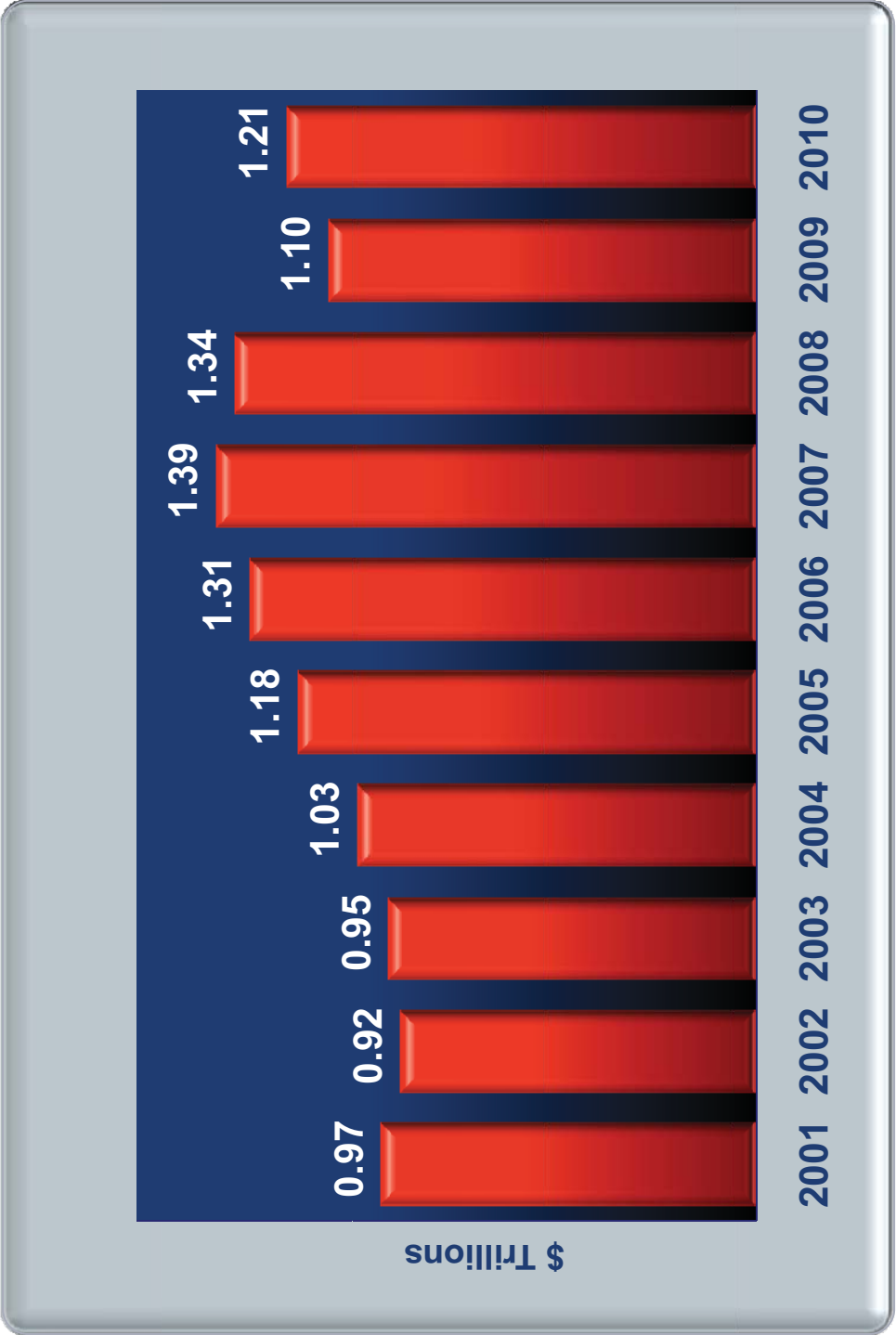
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US Business Logistics Costs



The US Business Logistics System Cost is the Equivalent of 8.3 Percent of Current GDP in 2010

\$ Billions	
Carrying Costs - \$2.064 Trillion All Business Inventory	
Interest	4
Taxes, Obsolescence, Depreciation, Insurance	280
Warehousing	112
Subtotal	396
Transportation Costs	
Motor Carriers	
Truck – Intercity	403
Truck – Local	189
Subtotal	592
Other Carriers	
Railroads	60
Water (International 28, Domestic 5)	33
Oil Pipelines	10
Air (International 17, Domestic 16)	33
Forwarders	32
Subtotal	168
Shipper Related Costs	9
Logistics Administration	47
TOTAL LOGISTICS COST	1,211

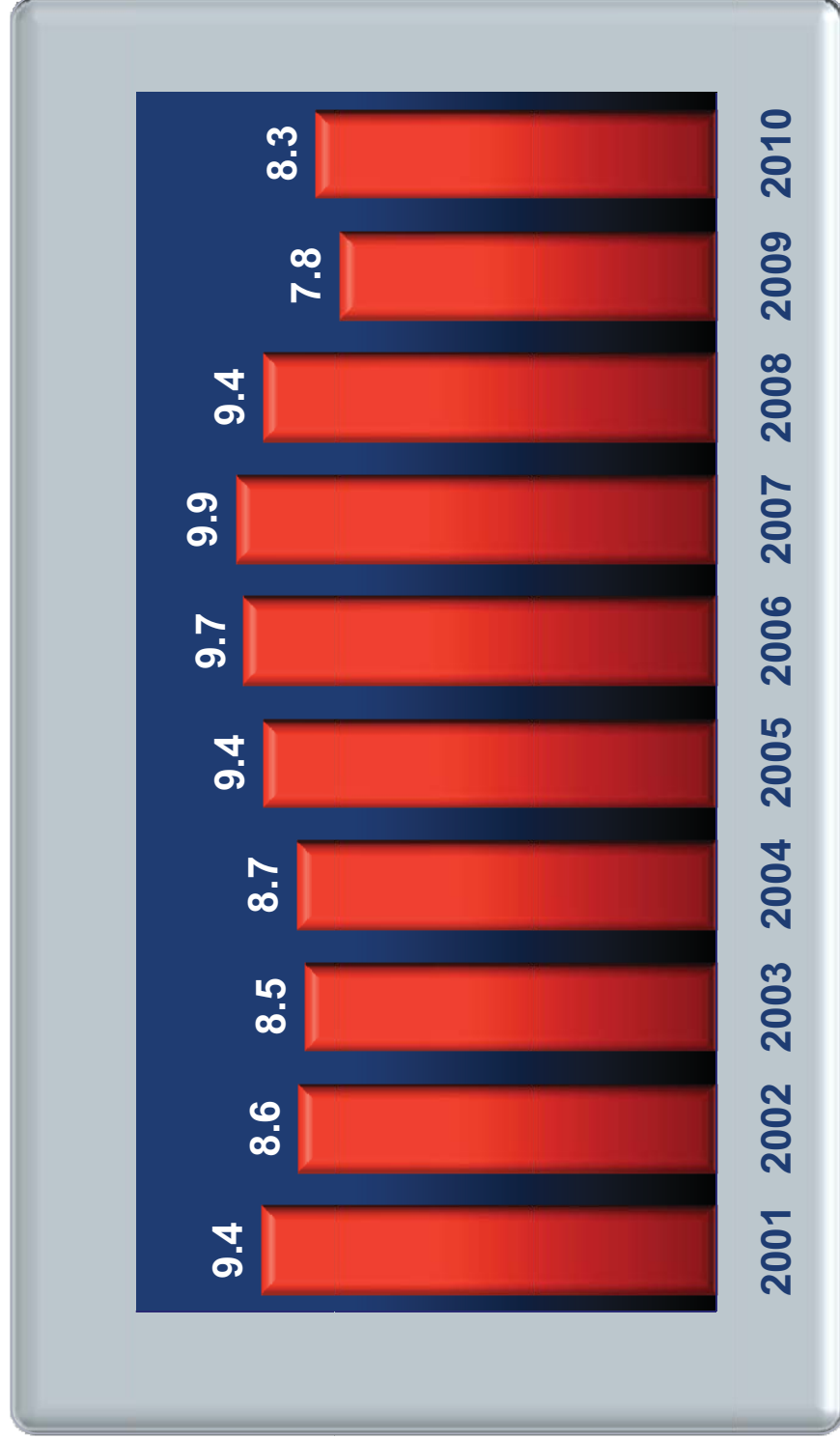
Up 10.3%

Up 10.5%

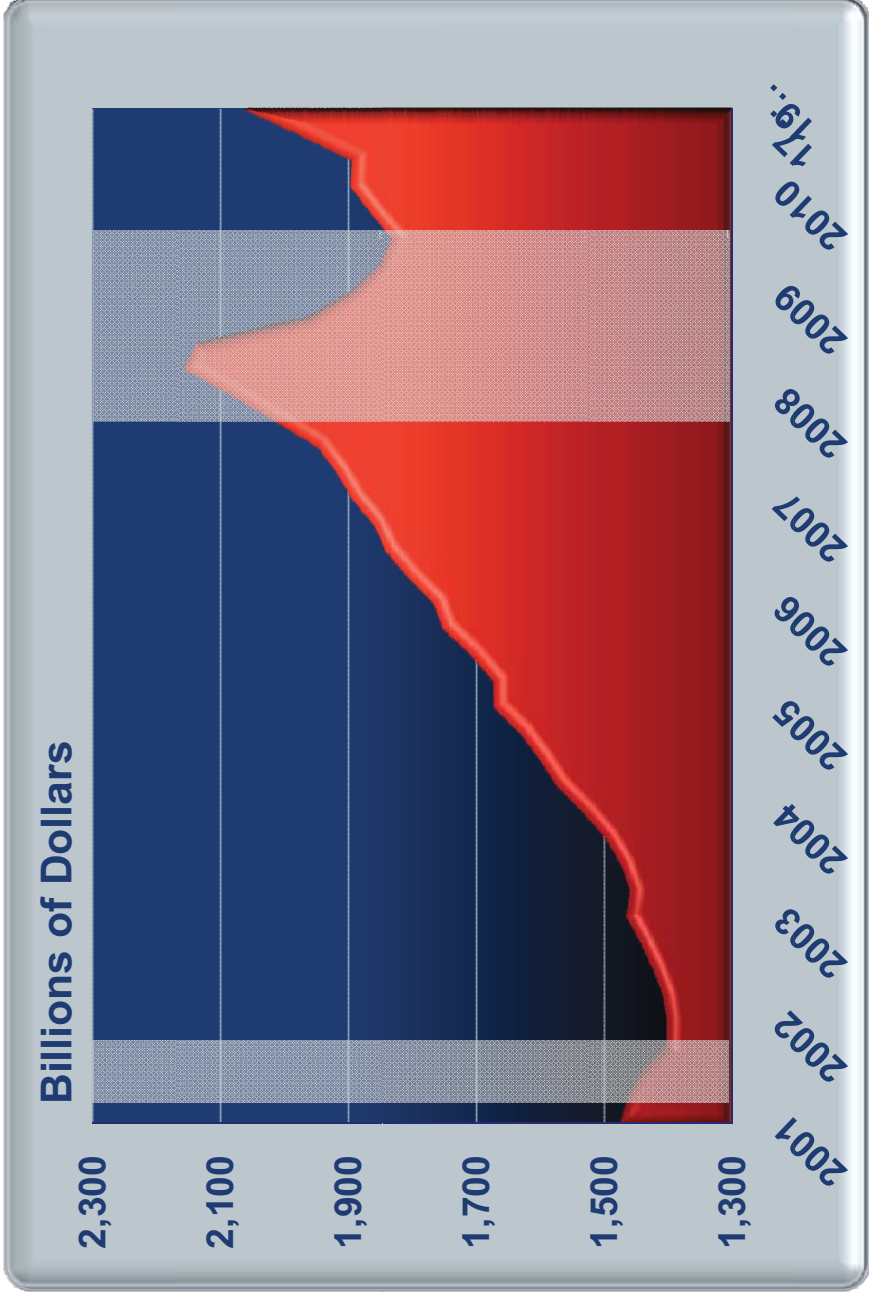
Up 10.4%



Logistics Cost As A Percent of GDP



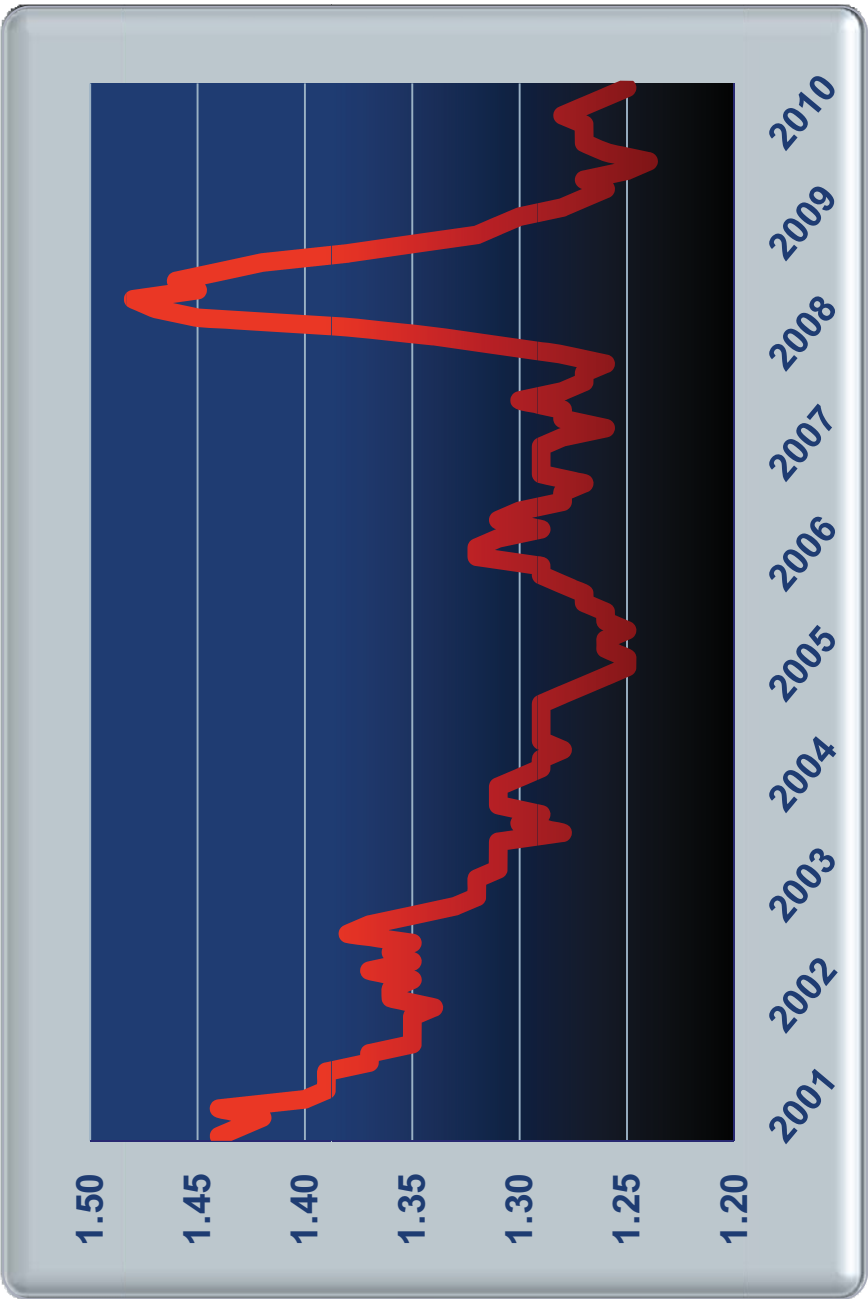
Total US Business Inventories



Recession Dates: 3/1/2001 to 11/1/2001 and 12/1/07 to 7/1/09

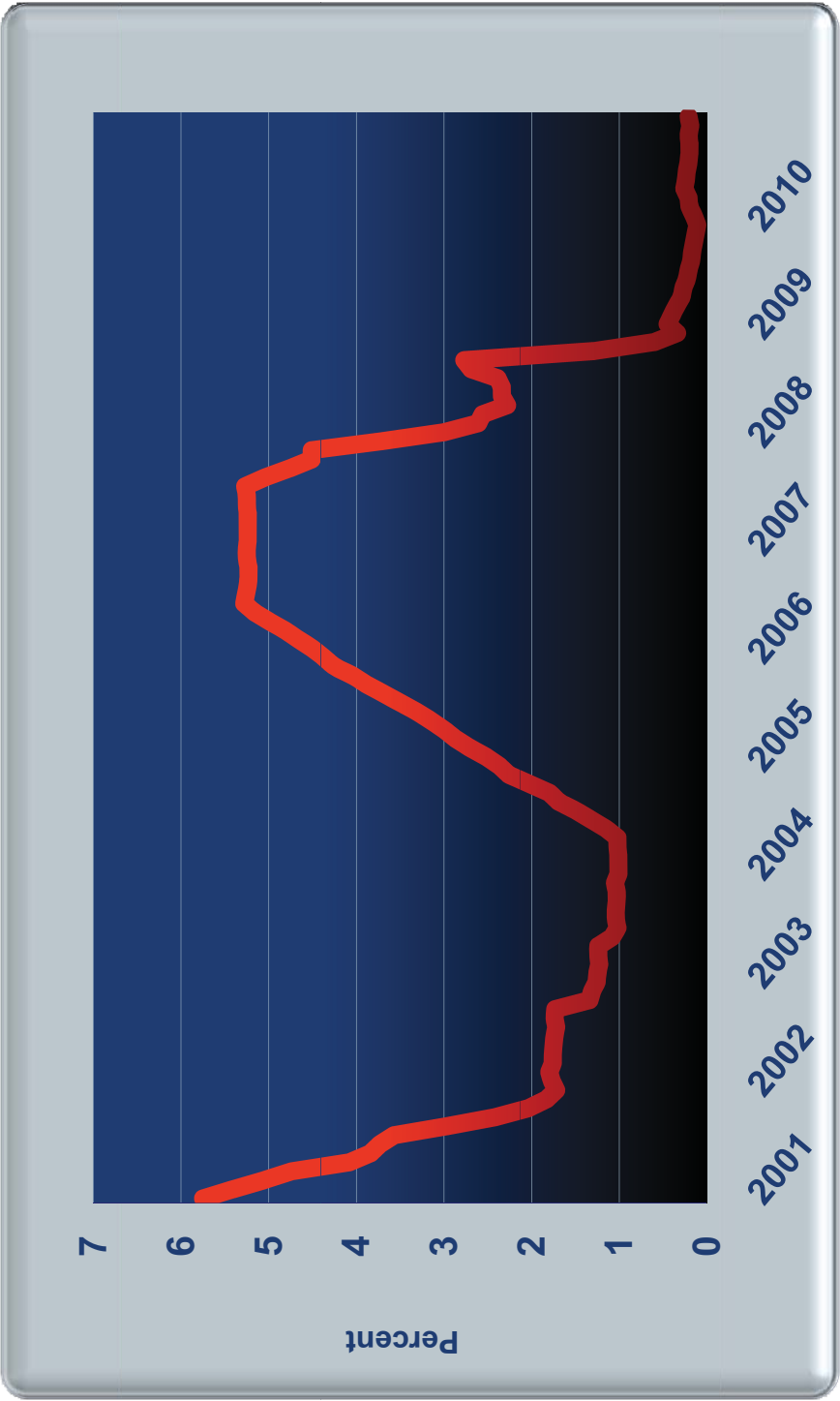
Source: US Department of Commerce, Census Bureau

The Inventory to Sales Ratio Has Remained Near Pre-Recession Levels



Source: US Department of Commerce, Census Bureau

US Average Commercial Paper Rates Remained Low in 2010



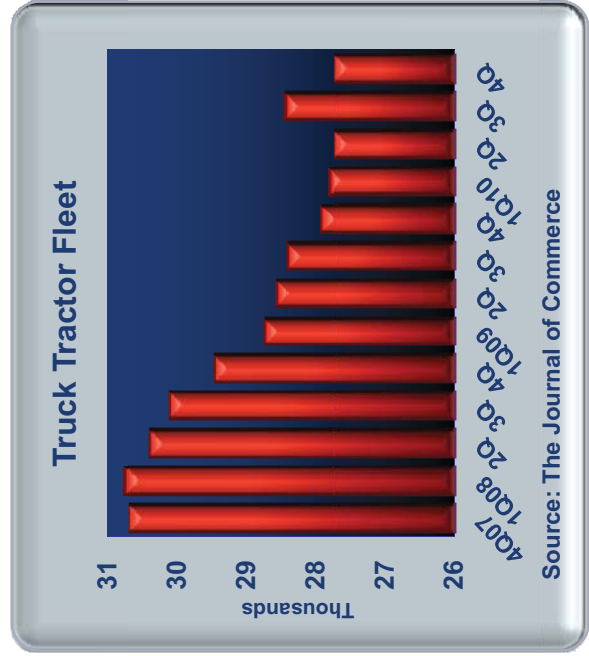
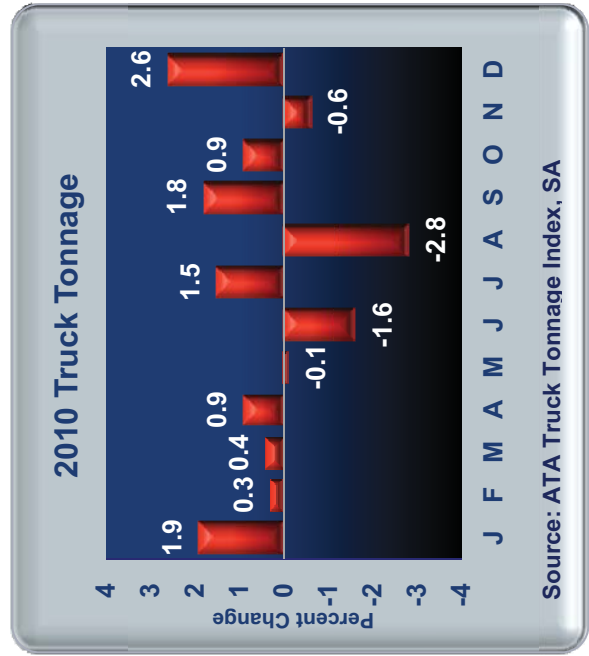
Source: Board of Governors of the Federal Reserve System

The US Business Logistics System Cost is the Equivalent of 8.3 Percent of Current GDP in 2010

	\$ Billions
Carrying Costs - \$2.064 Trillion All Business Inventory	
Interest	4
Taxes, Obsolescence, Depreciation, Insurance	280
Warehousing	112
Subtotal	396
Transportation Costs	
Motor Carriers	
Truck – Intercity	403
Truck – Local	189
Subtotal	592
Other Carriers	
Railroads	60
Water (International 28, Domestic 5)	33
Oil Pipelines	10
Air (International 17, Domestic 16)	33
Forwarders	32
Subtotal	168
Shipper Related Costs	9
Logistics Administration	47
TOTAL LOGISTICS COST 1,211	

Trucking Sector Continues to Face Pressures

- Shipment volumes were volatile and there is still more capacity than needed, especially in LTL, TL has tightened up
- Rates were still stubbornly flat for most trucking companies
- Rising operating costs have been brutal, especially fuel and driver pay
- Impact of CSA, new HOS rules, and environmental regulations
- Higher fuel prices and fuel surcharges – up almost 20 percent over 2009. Industry recovering only 70 percent of increase



Number of Truck Drivers vs Freight Carried



Source: Bureau of Labor Statistics, Bureau of Transportation Statistics, and author estimates

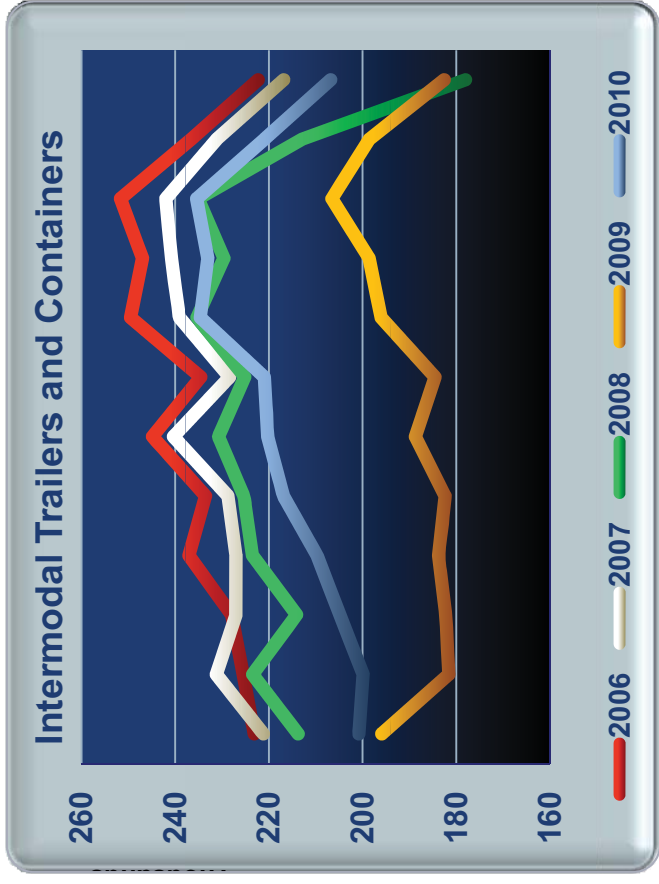
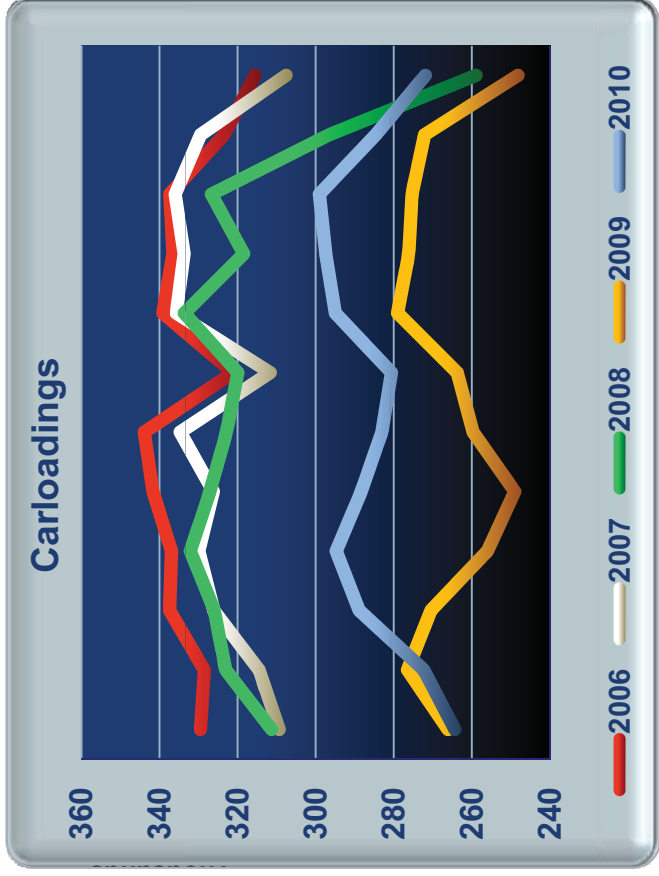
Some Issues Never Seem To Change

“Practically every truck manufacturer and nearly all employers complain of the great difficulty of securing drivers who are competent and who will work handling freight aside from those who drive horses.”


— **Traffic World, Dec. 12, 1914**

Railroads Perform Well in 2010

- Shipments were strong in the first half of the year, weaker to end the year
- Some rail equipment is still parked
- Rail car and locomotive orders larger than previous years
- Railroads are hiring



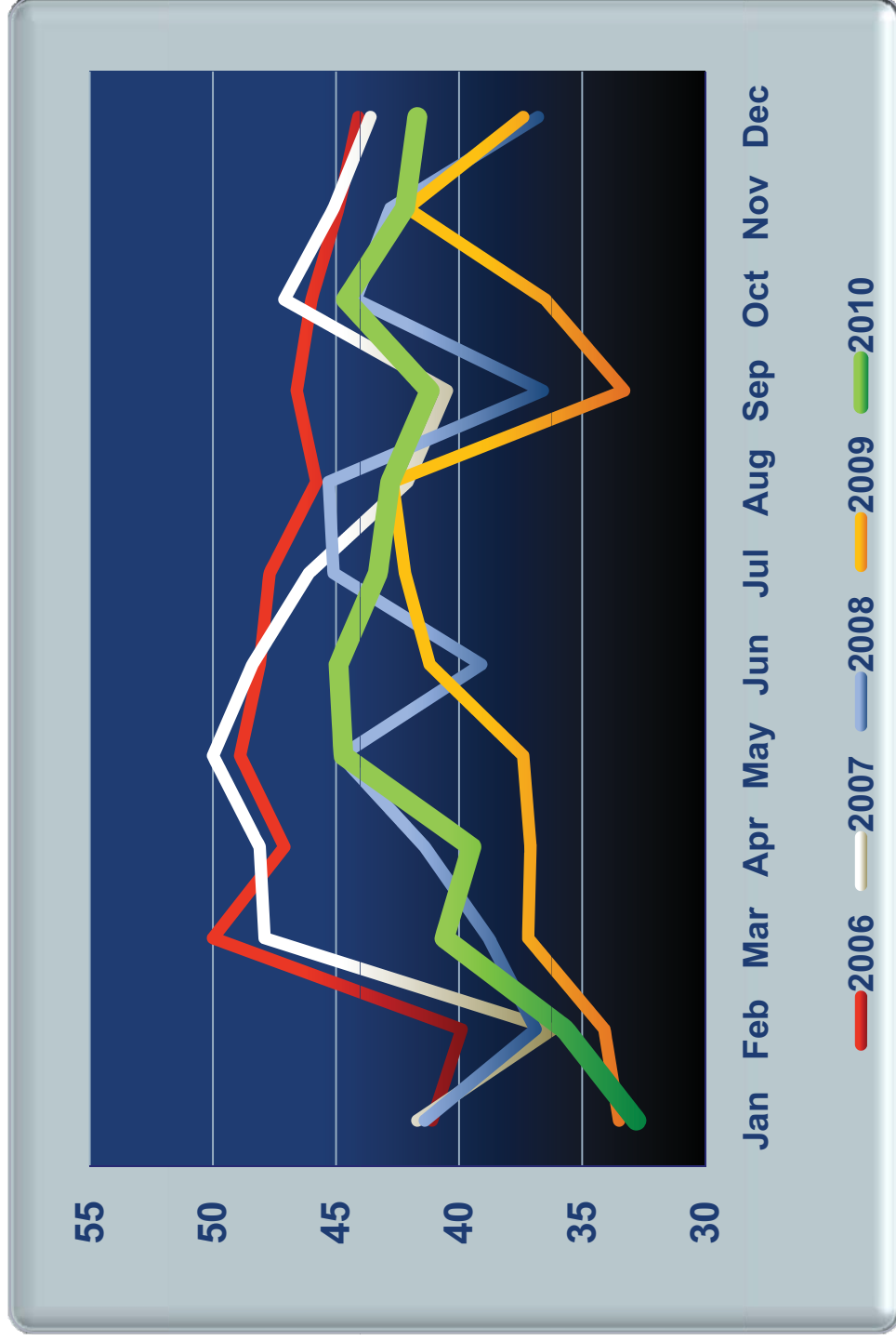
US Ports Lose Ground Again in 2010



Ports	2010	2009	2008	2007	2006
Los Angeles	5,553,108	5,028,998	5,670,897	5,740,261	5,743,400
Long Beach	4,462,232	3,765,560	4,611,671	4,994,949	4,798,617
New York	4,088,361	3,587,740	3,992,258	3,935,262	3,678,247
Savannah	2,169,497	1,914,751	2,115,986	2,041,521	1,609,131
Oakland	1,526,066	1,398,420	1,394,684	1,451,326	1,414,782
Norfolk	1,439,176	1,375,632	1,591,566	1,573,273	1,424,993
Seattle	1,414,490	1,072,838	1,082,573	1,289,364	1,222,596
Houston	1,373,372	1,256,049	1,370,759	1,415,657	1,295,366
Charleston	1,068,742	954,836	1,330,919	1,408,434	1,517,311
Tacoma	834,957	873,708	1,129,301	1,150,590	1,095,896
All U.S. Ports	28,334,106	28,380,903	29,282,675	30,133,253	28,641,171

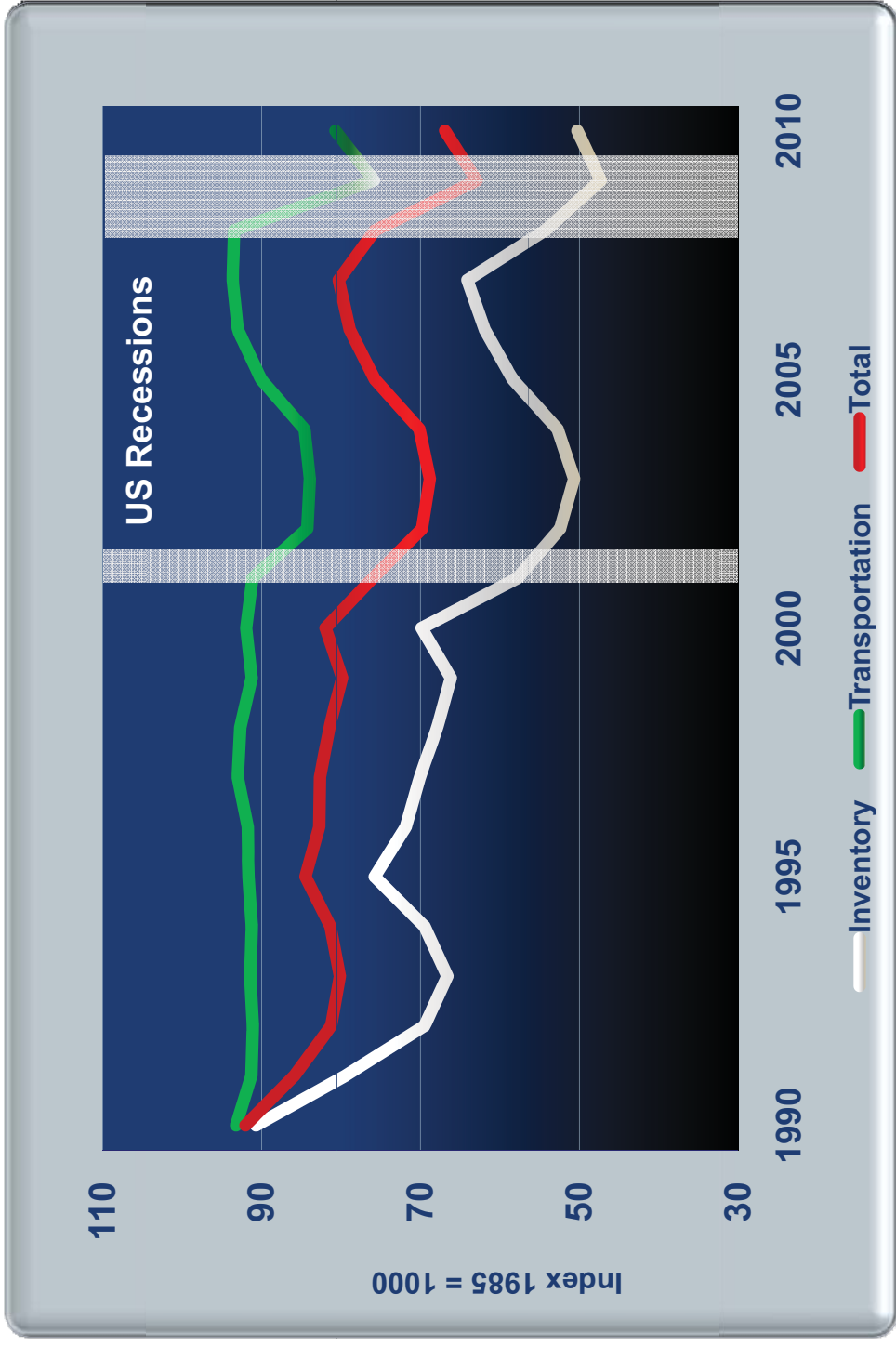
Source: Journal of Commerce PIERS Database, measured in TEUs

Monthly Tonnage Indicator for Internal Waterways



Source: US Army Corps of Engineers, Navigation Data Center

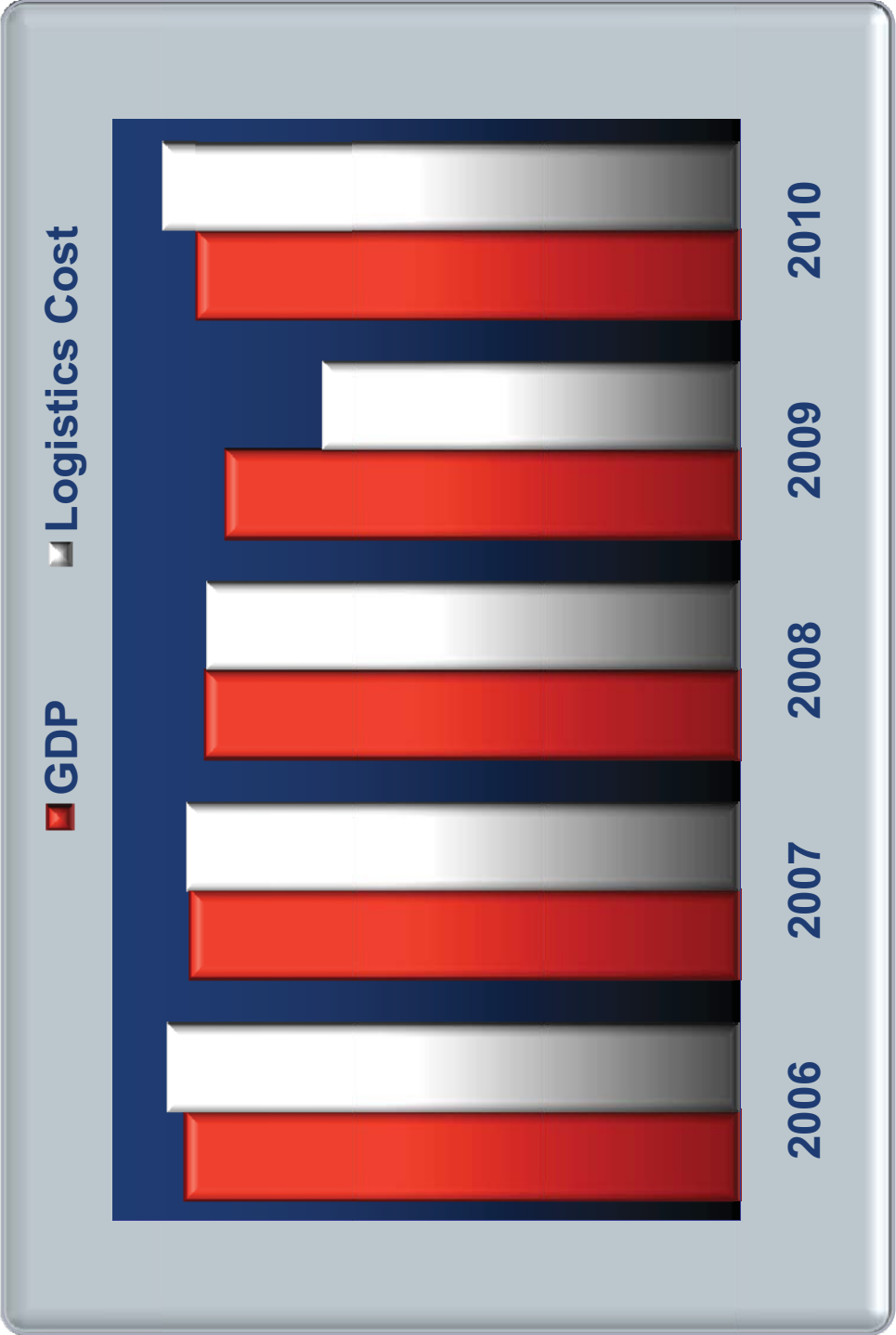
Index of Logistics Costs as a Percent of GDP 1990 - 2010



Recession Dates: 3/1/2001 to 11/1/2001 and 12/1/07 to 7/1/09



GDP Growth and Logistics Cost Growth



Can 2011 Deliver on Its Promising Start?

- ↑ 1Q 2011 was much stronger than 4Q 2010 for transportation
- ↑↓ Freight volumes were up in the first quarter, but have been trailing down in recent months
- ↑ Manufacturing has been leading the economy
 - ↓ 22 months into the recovery and it is still 6.5 percent below pre-recession levels
 - ↓ The Manufacturing sector laid off 5,000 workers in May
- ↓ GDP growth rates have not met expectations and the estimate was lowered to 1.8 percent for the 1Q
- ↑ Unemployment was edging downward and jobs creation was growing, although some sectors were still experiencing problems
 - ↓ Unemployment rose in May
 - ↓ Jobs creation is not even keeping pace with population growth

2011 Recap - Trucking

- Truck capacity is tightening and pricing control is shifting – by late 2011 we may start to see some very significant rate hikes, unless freight volumes continue to soften
- Carriers are recruiting aggressively for drivers
- Sales of medium and heavy duty trucks are gaining strength, but still have not reached replacement levels; used truck prices have soared and the supply is dwindling



- Diesel prices are on the rise once again with fuel surcharges growing – still not recovering 100 percent of costs
- New HOS rules in play
- Mandatory EOBRs on the horizon
- New NAFTA pilot allowing Mexican carriers into the US
- CSA having impacts

CSA is Still Causing Uncertainty



- CSA BASICS
 - Unsafe Driving
 - Fatigued Driving (Hours-of-Service)
 - Driver
 - Controlled Substances/Alcohol
 - Vehicle Maintenance
 - Cargo-Related
 - Crash Indicator
- A carrier's measurement for each BASIC depends on:
 - The number of adverse safety events (violations related to that BASIC or crashes)
 - The severity of violations or crashes
 - When the adverse safety events occurred (more recent events are weighted more heavily)



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CSA – The Stakes are High

- Carriers
 - Inspections
 - Managing your score - erroneous information
 - Higher fleet costs
 - Attracting and Retaining Good Drivers
 - Driving marginal carriers out of business
- Drivers
 - Training
 - Managing your score - erroneous information
 - Maximizing pay, benefits, working conditions
- Shippers
 - Potential liability issues involving due diligence in the event of an accident
 - Monitoring carriers' CSA scores
 - Using CSA scores in carrier selection process

2011 Recap - Railroads

- Rail carloadings got off to a slow start because of the bad weather, but posted good growth in 1Q 2011
- 2Q 2011 has seen some very mixed results with carloadings declining in some weeks
- Expect more growth in intermodal as railroads increasing become the mode of choice for long hauls; favorite mode now because fuel surcharges are about 50 percent of those for trucks; rates are often 10 to 20 percent lower than truckload rates

- The railroads are ready for expansion, but it will come gradually; they could handle a 10 to 15 percent increase in volume before there are any worries about capacity issues
- New container chassis distribution model is underway

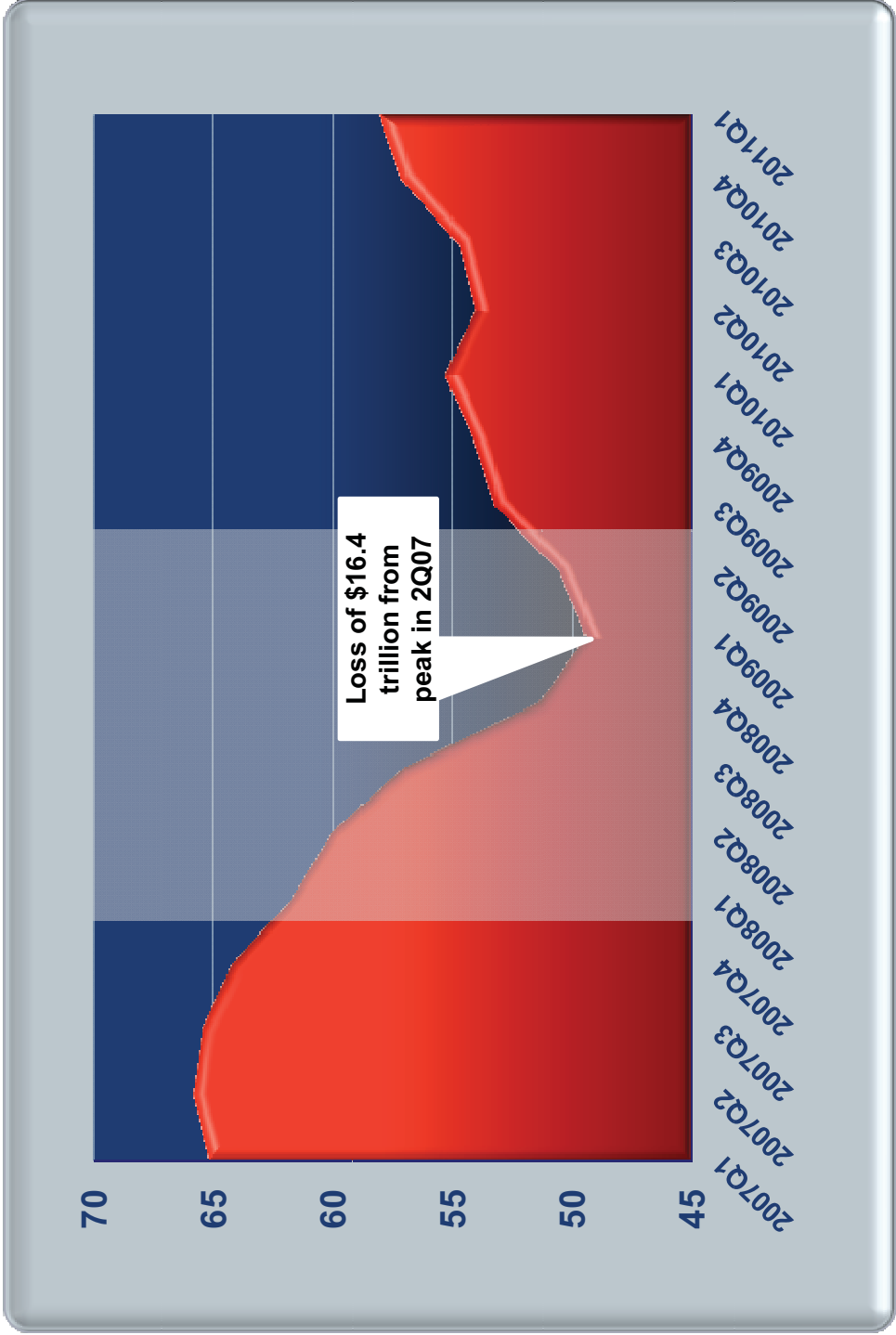


2011 Recap – Air and Water Carriers

- The air cargo industry was still going strong in 1Q 2011, but shipments have slowed in recent weeks
 - Retailers have indicated a willingness to use air freight to put off buying decisions, rather than risk high inventories
 - Carriers have no plans to add capacity because they do not expect to maintain the market share
- Ocean carriers have tremendous excess capacity and are still adding new ships to their fleets.
 - Rates rose dramatically, well over 100 percent for some shipments, during 2010, but carriers are now sacrificing rates for market share and the ensuing competition is driving rates down again

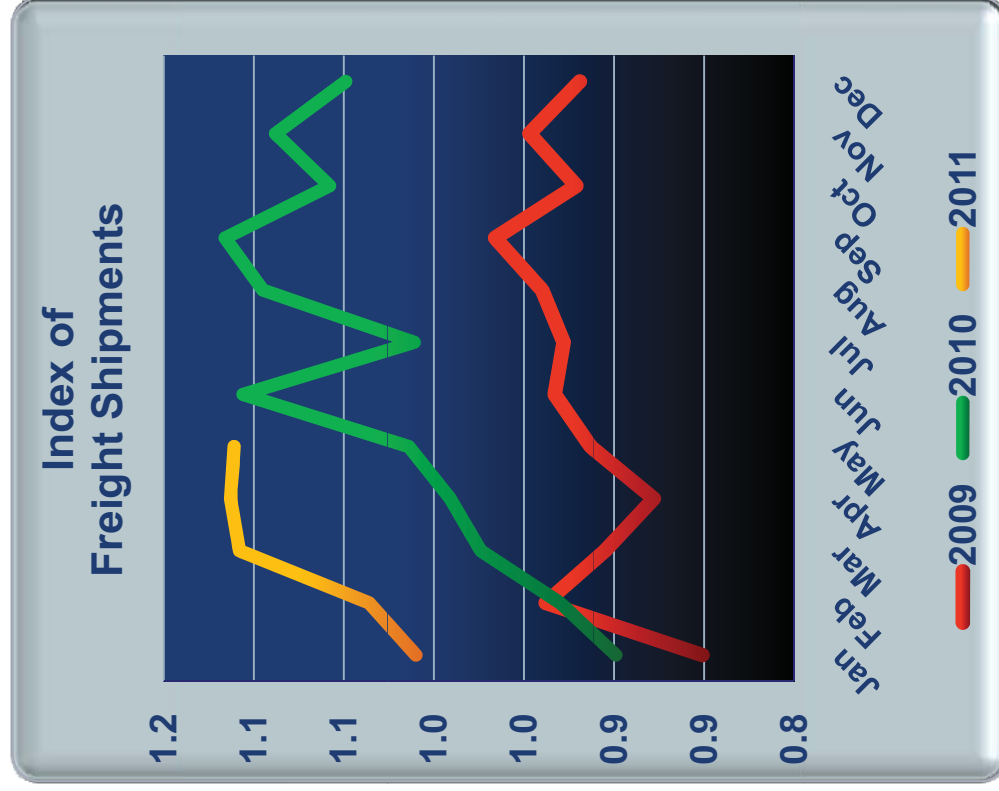
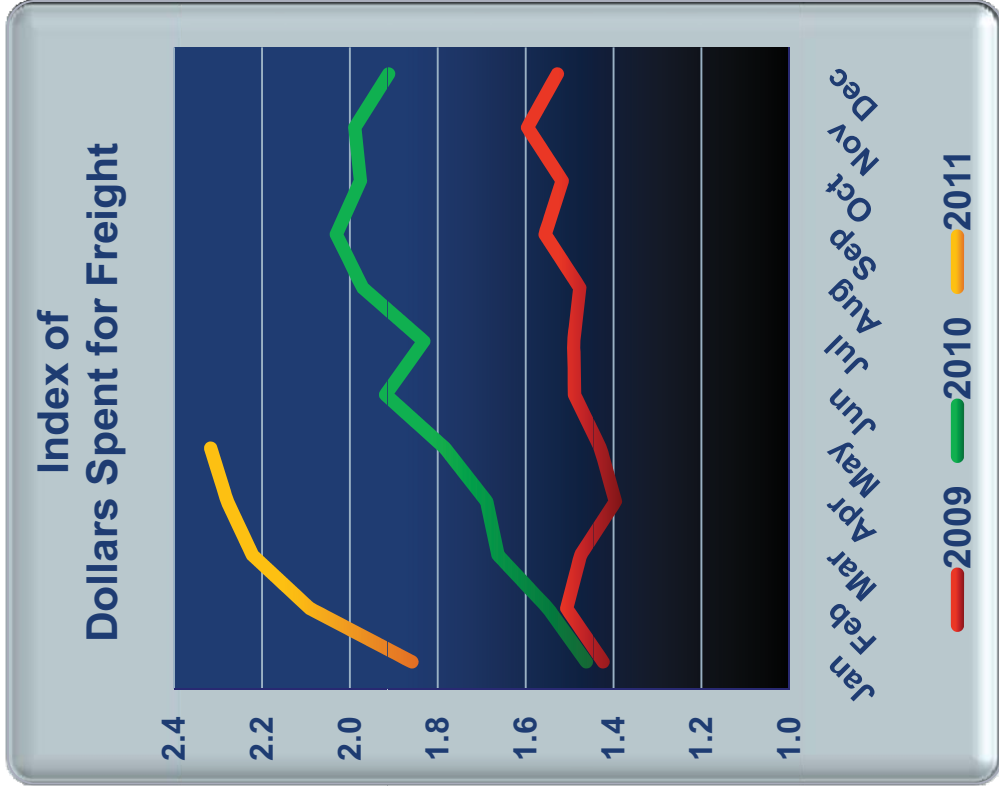


Household Net Worth



Source: Federal Reserve

Cass Monthly Freight Indexes



Source: Cass Logistics, Cass Freight Indexes

Summary

- 2010 Logistics Costs increased to \$1,211 billion
- Logistics cost were equivalent to 8.3 percent of GDP in 2010
- Transportation costs rose 10.4 percent and now account for 5.2 percent of nominal GDP – all modes dropped substantially
- Inventory carrying costs rose 10.3 percent and now account for 2.7 percent of nominal GDP –inventories were up and interest rates dipped still lower
- After a good start, 2011 has slowed considerably and estimates of growth are being revised downward

The Cost of the Business Logistics System in Relation to Gross Domestic Product

\$ Billion Except GDP

YEAR	NOMINAL GDP \$ TRILLION	VALUES OF ALL BUSINESS INVENTORY	INVENTORY CARRYING RATE	INVENTORY CARRYING COSTS	TRANSPOR- TATION COSTS	ADMINI- STRATIVE COSTS	TOTAL U.S. LOGISTICS COST	LOGISTICS % OF GDP	INVENTORY AS A % OF GDP	TRANSPOR- TATION AS A % OF GDP	INV. AS A % OF GDP	TRAN AS A % OF GDP	TOT. AS A % OF GDP	GDP AS A % OF GDP	TOT AS A % OF TRAN 1985 BASE
1981	3.13	747	34.7%	259	228	19	506	16.2	8.3	7.3	154	112	131	74	83
1985	4.22	847	26.8%	227	274	20	521	12.3	5.4	6.5	100	100	100	100	100
1990	5.80	1041	27.2%	283	351	25	659	11.4	4.9	6.1	91	93	92	137	128
1991	5.99	1030	24.9%	256	355	24	635	10.6	4.3	5.9	79	91	86	142	130
1992	6.34	1043	22.7%	237	375	24	636	10.0	3.7	5.9	69	91	81	150	137
1993	6.67	1076	22.2%	239	396	25	660	9.9	3.6	5.9	67	91	80	158	145
1994	7.09	1127	23.5%	265	420	27	712	10.0	3.7	5.9	69	91	81	168	153
1995	7.41	1211	24.9%	302	441	30	773	10.4	4.1	6.0	76	92	84	176	161
1996	7.84	1240	24.4%	303	467	31	801	10.2	3.9	6.0	72	92	83	186	170
1997	8.33	1280	24.5%	314	503	33	850	10.2	3.8	6.0	70	93	83	197	184
1998	8.79	1317	24.4%	321	529	34	884	10.1	3.7	6.0	68	93	81	208	193
1999	9.35	1381	24.1%	333	554	35	922	9.9	3.6	5.9	66	91	80	222	202
2000	9.95	1478	25.3%	374	594	39	1007	10.1	3.8	6.0	70	92	82	236	217
2001	10.29	1403	22.8%	320	609	37	966	9.4	3.1	5.9	58	91	76	244	222
2002	10.64	1451	20.7%	300	582	35	917	8.6	2.8	5.5	52	84	70	252	212
2003	11.14	1508	20.1%	304	607	36	947	8.5	2.7	5.4	51	84	69	264	222
2004	11.87	1650	20.4%	337	652	39	1028	8.7	2.8	5.5	53	85	70	281	238
2005	12.64	1782	22.3%	397	739	46	1182	9.4	3.1	5.8	58	90	76	300	270
2006	13.40	1859	24.0%	446	809	50	1305	9.7	3.3	6.0	62	93	79	318	295
2007	14.06	2015	24.1%	485	855	54	1394	9.9	3.4	6.1	64	94	80	333	312
2008	14.37	1962	21.4%	419	872	52	1343	9.4	2.9	6.1	54	93	76	341	318
2009	14.12	1865	19.3%	359	695	42	1097	7.8	2.5	4.9	47	76	63	335	254
2010	14.66	2064	19.2%	396	768	47	1211	8.3	2.7	5.2	50	81	67	347	280

Note: The Bureau of Economic Analysis issued a revised series for GDP which has been incorporated into this table.

Data Sources: National Income and Products Accounts, Bureau of Economic Analysis; U.S. Statistical Abstract, U.S. Department of Commerce

Methodology: Business Logistics: Heskett, Ivie, Glaskowsky, 2nd Edition, 1973 The Ronald Press, New York, NY

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