Electroindustry Economic Outlook

IDEA E-Biz Forum 2008

Washington, DC

September 16, 2008

Donald R. Leavens, PhD

VP & Chief Economist

National Electrical Manufacturers Association

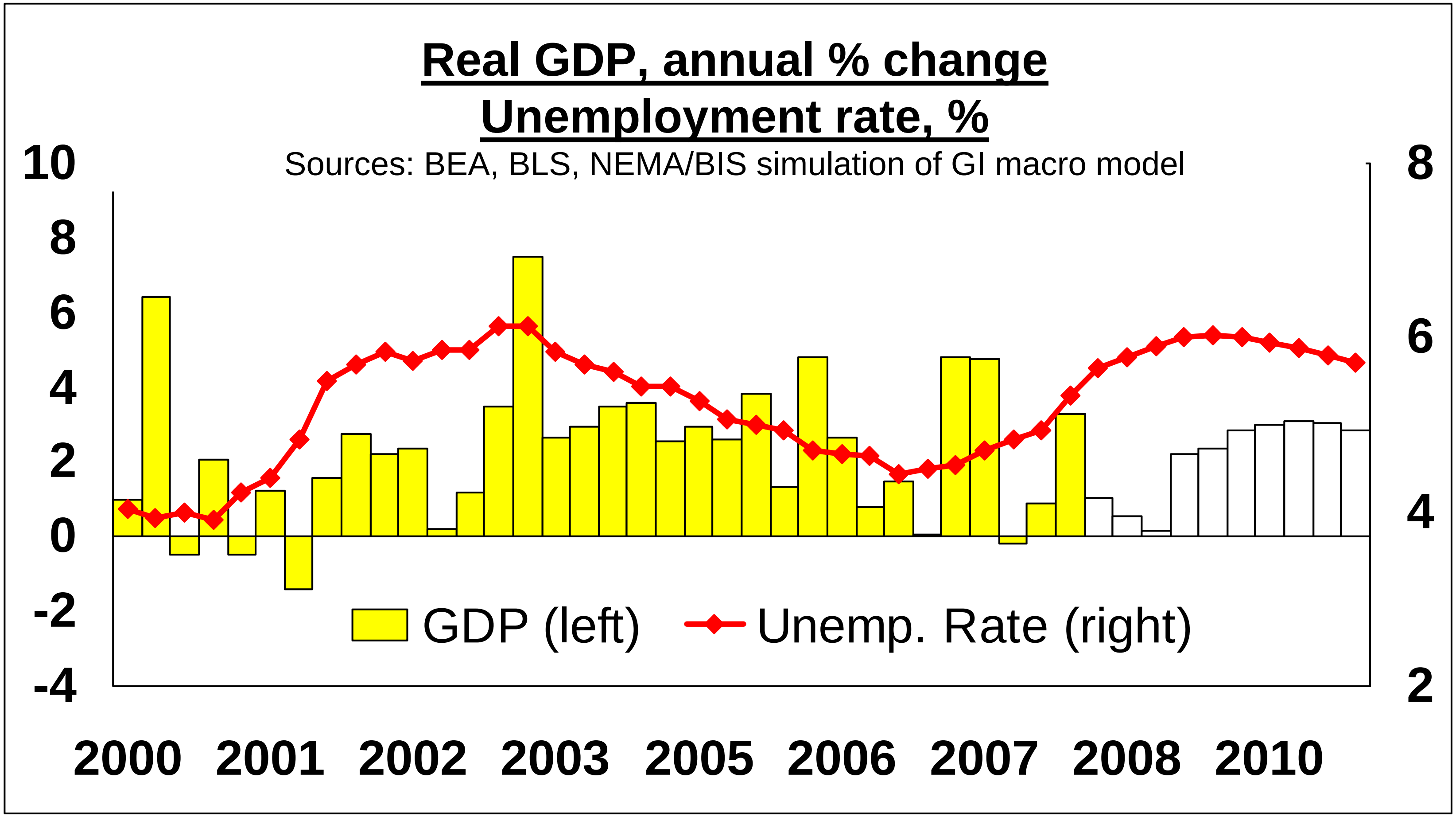
The U.S. economy expanded at an above-trend rate in Q2, but a significant slowing is expected moving into 2009

- Real GDP growth for Q2 was revised significantly upward by the Department of Commerce, to 3.3% at a seasonally adjusted annual rate (SAAR) from the 1.9% gain originally reported
  - Paramount has been the role of exports, which surged more than 13% SAAR, and accounted for half of Q2 growth
  - This latest view of the immediate past means the U.S. economy expanded in Q2 at a rate faster than it has averaged over the last 4 decades
  - Economic growth averaged more than 2% over the January to June period, putting to rest any notion that the economy was in recession in the first half of the year

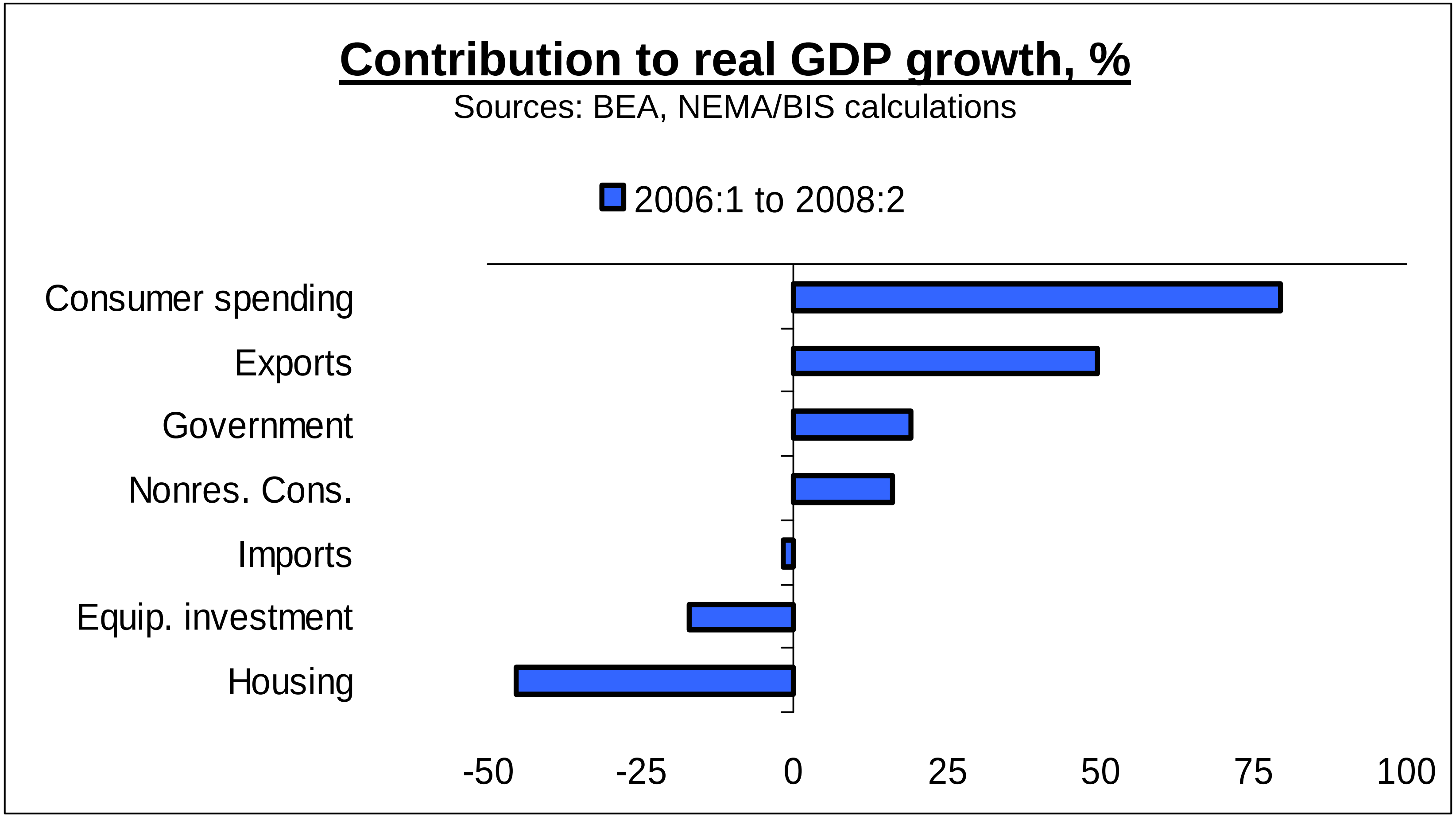
The U.S. economy expanded at an above-trend rate in Q2, but a significant slowing is expected moving into 2009

- Nonetheless, a rear-view mirror is not a terribly useful device for looking forward, and several obstacles on the road ahead strongly suggest that the second half of the year will be bumpier than the first
  - A post stimulus hangover is likely to lead to declines in consumer spending by the fourth quarter
  - Today's single strongest growth engine, exports, will come under increasing pressure as the dollar stabilizes and economic weakness worsens in Japan and Europe
  - The housing market remains deeply troubled and, while not the most likely scenario, could deteriorate far more sharply
  - The financial market crisis has yet to play out fully
  - Despite the recent retreat in oil prices, inflation remains a significant threat and complicates monetary policy decisions
    - In any case, the Fed is expected to hold interest rates steady through at least late 2008

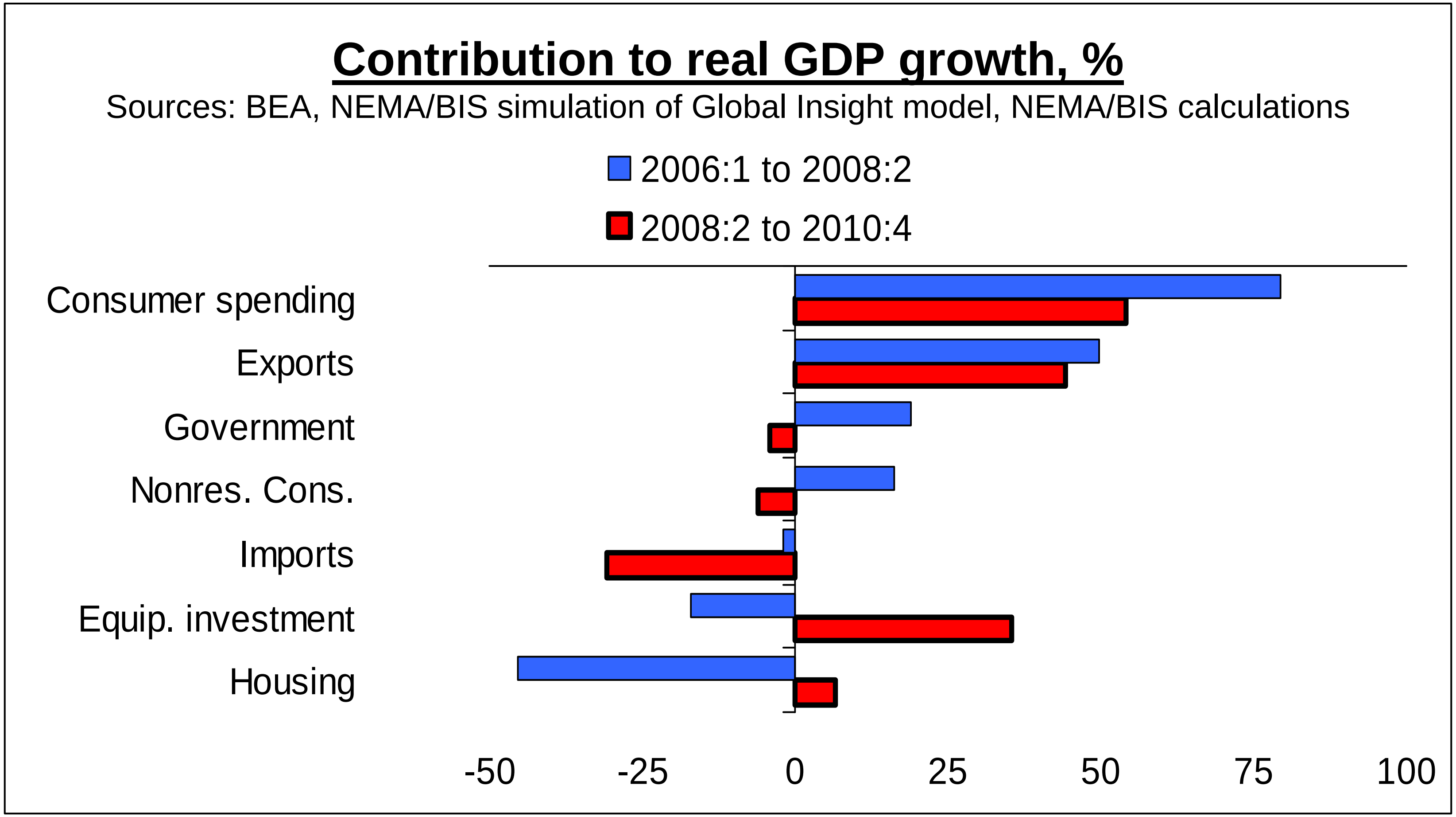
The U.S. economy expanded at an above-trend rate in Q2, but a significant slowdown is expected moving into 2009



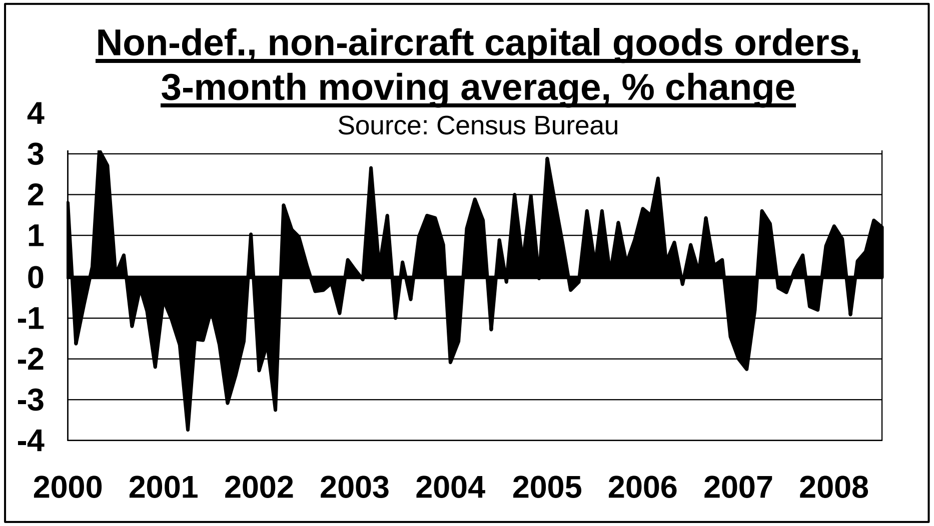
Consumer spending and exports account for the largest share of economic growth over the past 10 quarters

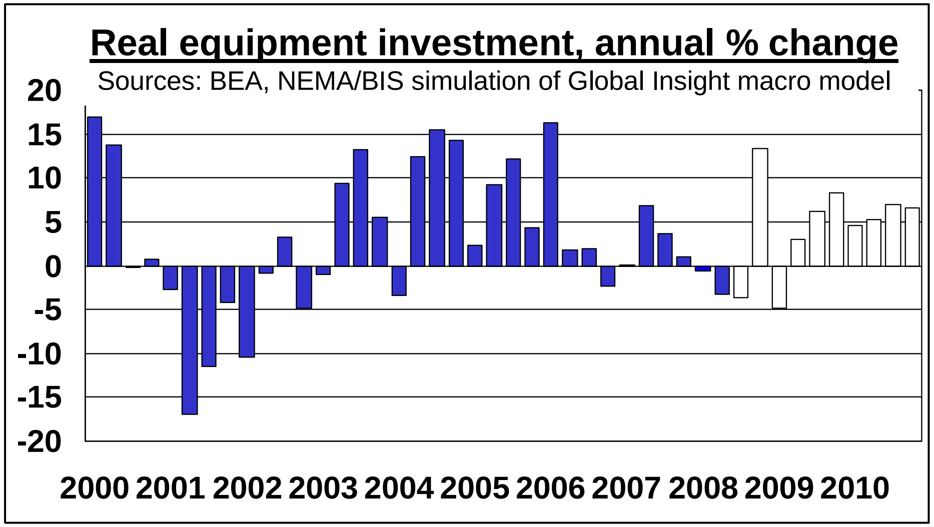


The drag from the housing sector is likely to disappear moving forward



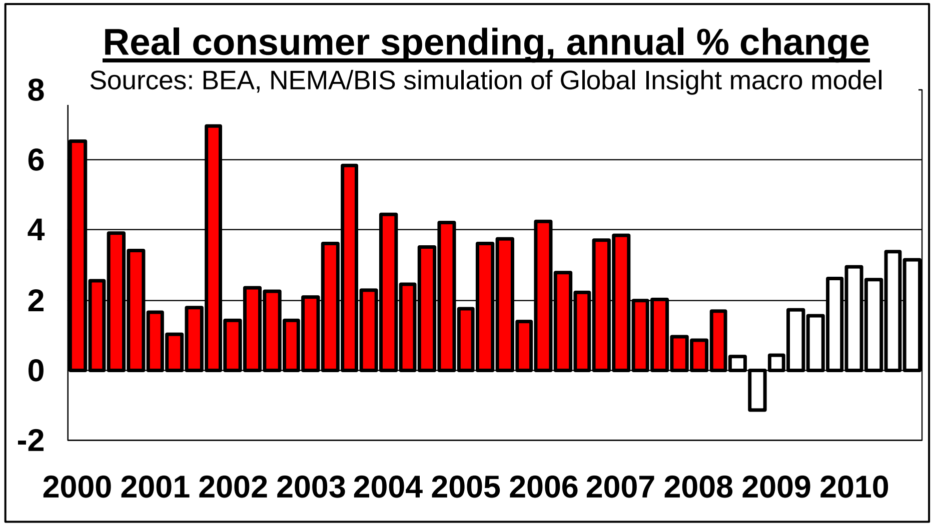
Weakened domestic spending prospects have led to a stagnant equipment investment environment

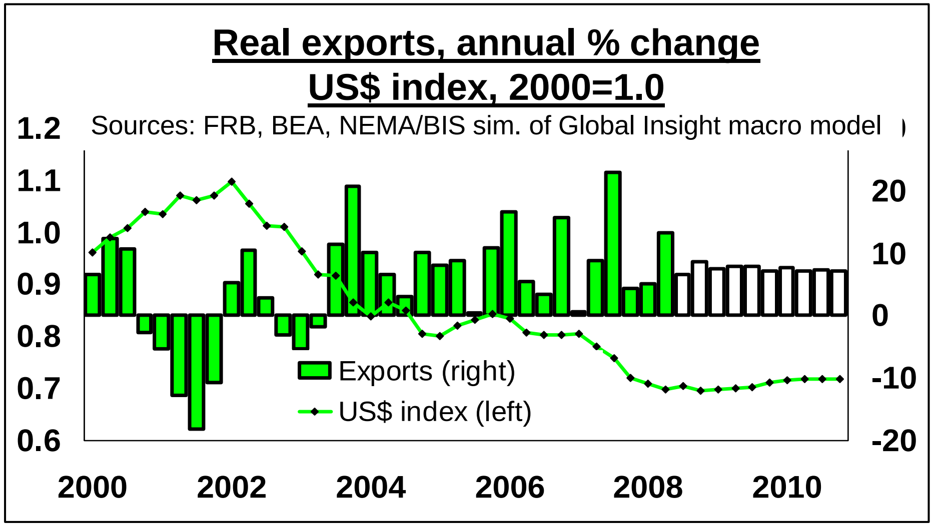




- Business investment spending on equipment and software remains in the doldrums
  - Outlays slipped 3.2% SAAR in Q2, following a 0.6% dip in Q1
- Conflicting signals from different indicators cloud the investment outlook
  - Core capital goods orders have trended upward since spring, auguring well for future investment outlays
  - On the other hand, ISM orders data point in the opposite direction
- The figures on capital good orders likely reflect the coming upsurge in investment in Q4, as firms rush to take advantage of accelerated depreciation allowances
- Still, tight credit and ample caution amidst a turbulent business environment will continue to act as a drag through the middle of next year

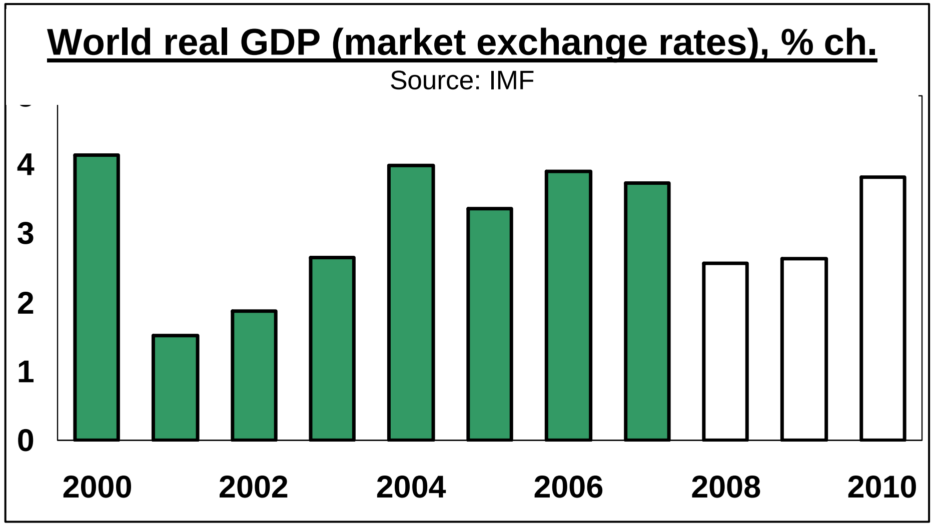
Aided by tax rebates, but hampered by food and energy costs, consumer spending growth has struggled

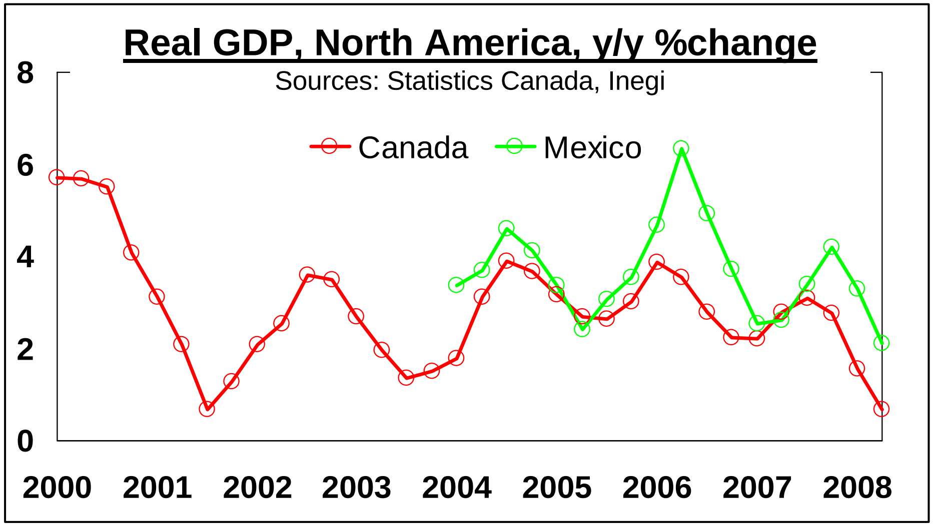




- Consumer spending managed a 1.7% Q2 increase (SAAR), feeble by historical standards but perhaps not so terrible given such strong headwinds: falling home values, a volatile stock market, a weakening employment situation, and surging food and energy costs
- As the transitory effect of the tax rebates fades, spending growth is likely to erode to near-recessionary conditions before recovering modestly as 2009 progresses
  - Indeed, early data for July showed inflation adjusted consumption expenditures down 0.4% m/m
- Export growth is expected to remain a potent contributor to the overall economy, but significant downside risks are present thanks to a rebounding dollar and rapid deterioration abroad

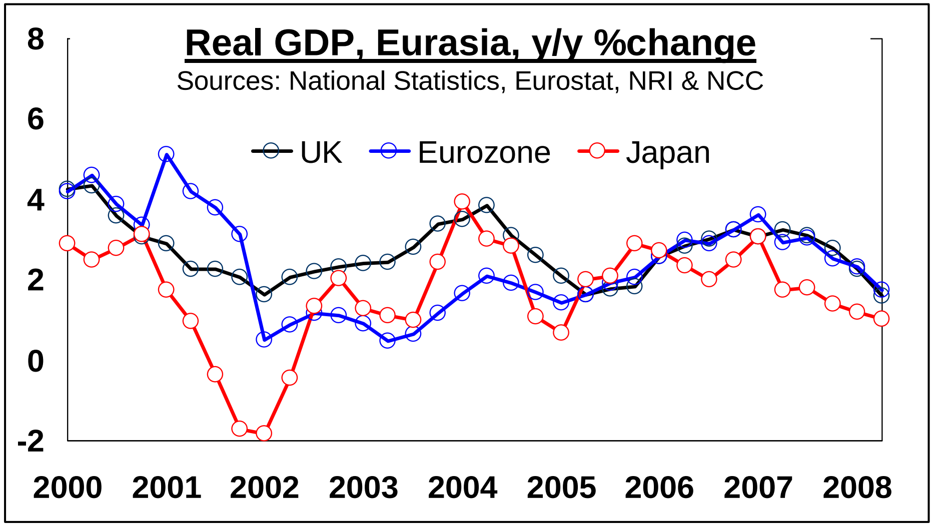
The global economy is ratcheting down after four consecutive years of strong expansion

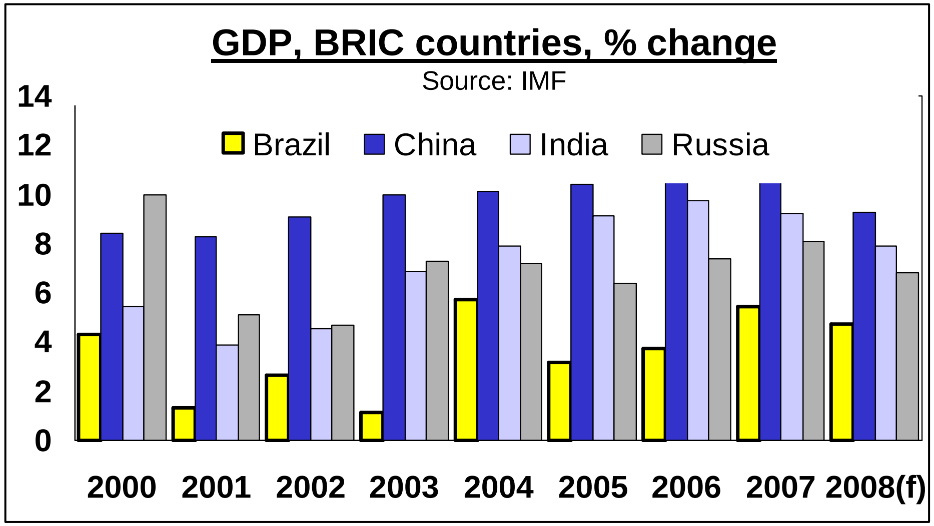




- Following average annual gains of 3.7% from 2004 to 2007, the IMF forecasts a decline in world GDP growth to only 2.6% in 2008 and 2009
  - With the global business cycle increasingly synchronized, weakening western consumption is dragging on export driven growth in the developing world, particularly developing Asia
  - Meanwhile, the impacts of soaring food and energy prices are greatest in developing countries
- Canadian real GDP growth slipped well below 1% y/y in Q2 and is expected to run at only 1% for 2008 as a whole and between 1.5% and 2% in 2009
  - The resource rich western provinces will continue to see the most rapid gains
  - The manufacturing-focused east will struggle thanks to a relatively high Canadian dollar and struggling US market

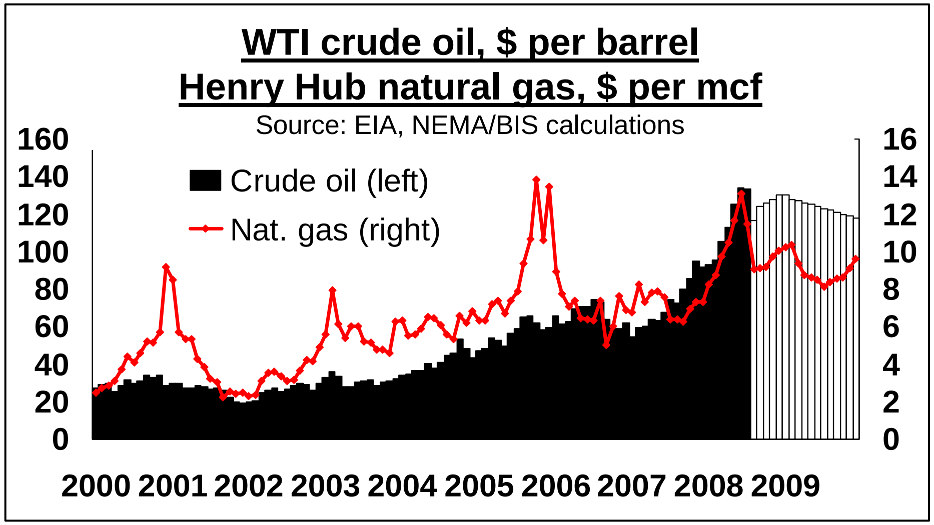
Recent data show Europe and Japan slipping into recession

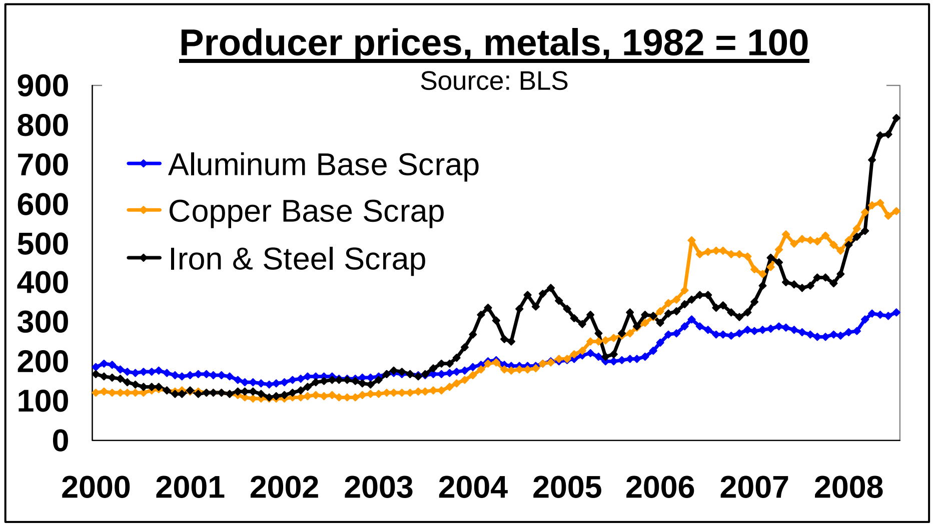




- European conditions are rapidly weakening
  - Real GDP growth dropped to 1.6% y/y in Q2 in the UK, and to 1.8% in the Eurozone
  - Higher frequency data on retail sales, business confidence, and industrial production suggest further declines are imminent, even as price levels remain elevated
  - Monetary policy, which heretofore had taken an aggressive posture toward rising inflation, has recently turned dovish in the face of flagging growth
- Economic growth in Japan slid for the third straight quarter, falling to 1% y/y in Q2
  - Abrupt declines in the manufacturing sector have led the government to declare that a 5 year recovery may be in jeopardy
- The BRIC nations are expected to see growth continue at high rates in 2008, but weakening Western export markets will lead to a slowdown relative to 2007

Oil prices dropped more than 20% from mid-July to mid-August, but metals have pressed upward





- The price of domestic benchmark West Texas Intermediate crude oil continued its pull back in the first half of August
  - WTI dropped from a record high of $145.16 on 7/14 to $113.10 on 8/12, a plunge of 22%
  - The correction was likely due to commodities investors downwardly revising their near-term expectations for global demand growth
- Global steel prices resumed their sharp upward trajectory in July, while copper and aluminum also gained ground, albeit at a slower pace:
  - iron & steel scrap: +5.2% m/m; +110.5% y/y
  - copper base scrap: +1.8% m/m; +14.1% y/y
  - alum. base scrap: +2.4% m/m; +18.3% y/y

‘Tis the Season: Major economic policy proposals of the presidential candidates

Taxes

- **OBAMA:** Will renew the Bush tax cuts for those making under $250,000, offer new tax credits for workers and homeowners, eliminate income taxes for many seniors, make permanent the R&E tax credit, expand the EITC and saver's credit, and close corporate tax loopholes.

- **McCAIN:** Will make permanent most of the Bush tax cuts, eliminate the AMT, reform the estate tax, cut corporate income taxes, create a new, permanent R&E tax credit, raise the dependent child exemption, close corporate tax loopholes, and create an alternative tax system with fewer rates and deductions.

Source: The Committee for a Responsible Federal Budget

'Tis the Season: Major economic policy proposals of the presidential candidates

Healthcare

- **OBAMA:** Will move toward universal health coverage through mandates for employers and children as well as large public subsidies while enacting measures to reduce healthcare costs such as prescription drug reimportation, better Health IT, and incentives to increase efficiency.
- **McCAIN:** Will replace the current employer healthcare exclusion with a flat refundable tax credit for those who purchase insurance, while implementing measures to reduce healthcare costs such as prescription drug reimportation, tort reform, better Health IT, and more consumer driven medicine.

Source: The Committee for a Responsible Federal Budget

'Tis the Season: Major economic policy proposals of the presidential candidates

Social Security

- **OBAMA:** Will raise additional Social Security revenue by applying new taxes to income above $250,000 and will reform Social Security in a bi-partisan manner; has ruled out privatization and opposes raising the retirement age or cutting benefits.
- **McCAIN:** Will reform Social Security in a bi-partisan manner, or by submitting a comprehensive proposal for an up or down vote if necessary; opposes increasing taxes and supports private accounts to complement, rather than replace, Social Security.

Source: The Committee for a Responsible Federal Budget

‘Tis the Season: Major economic policy proposals of the presidential candidates

Energy

- **OBAMA:** Will implement a cap-and-trade system for greenhouse gasses with fully-auctioned permits, fund the development of new and better green technology, and end tax subsidies to oil and gas companies.

- **McCAIN:** Will implement a cap-and-trade system for greenhouse gasses with both auctioned and freely distributed permits, encourage energy conservation and diversification, and end several energy subsidies.

Source: The Committee for a Responsible Federal Budget

‘Tis the Season: Major economic policy proposals of the presidential candidates

Other New Spending

- **OBAMA:** Will introduce a number education reforms, while increasing basic research, growing the size of the military and increasing foreign aid.
- **McCAIN:** Will increase the size of the military, develop a missile defense shield, and reform unemployment insurance.

Spending Cuts

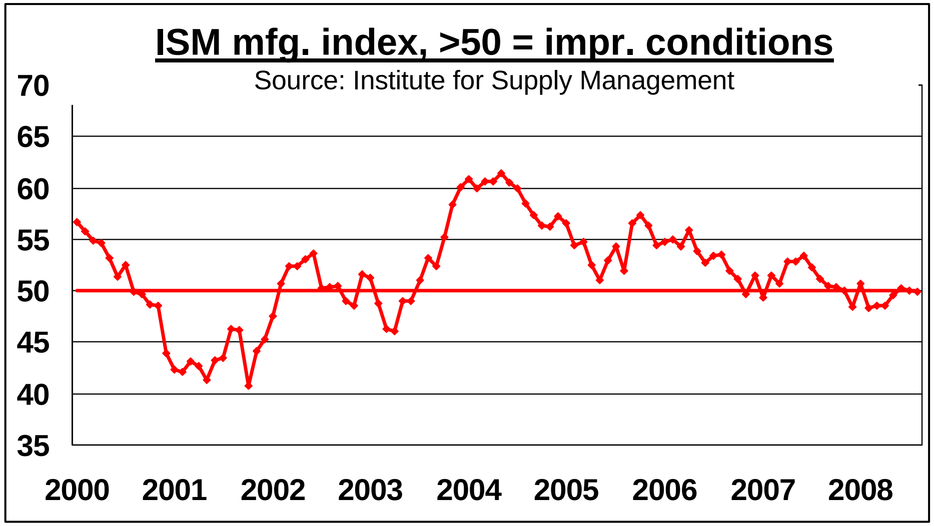
- **OBAMA:** Will eliminate the guaranteed student loan program, cut earmarks, reform contracting procedures, reduce wasteful spending, and realize savings from ending the Iraq war.
- **McCAIN:** Will eliminate all earmarks, freeze discretionary spending for a year, reform the defense procurement process, reduce agricultural subsidies ,and cut wasteful spending.

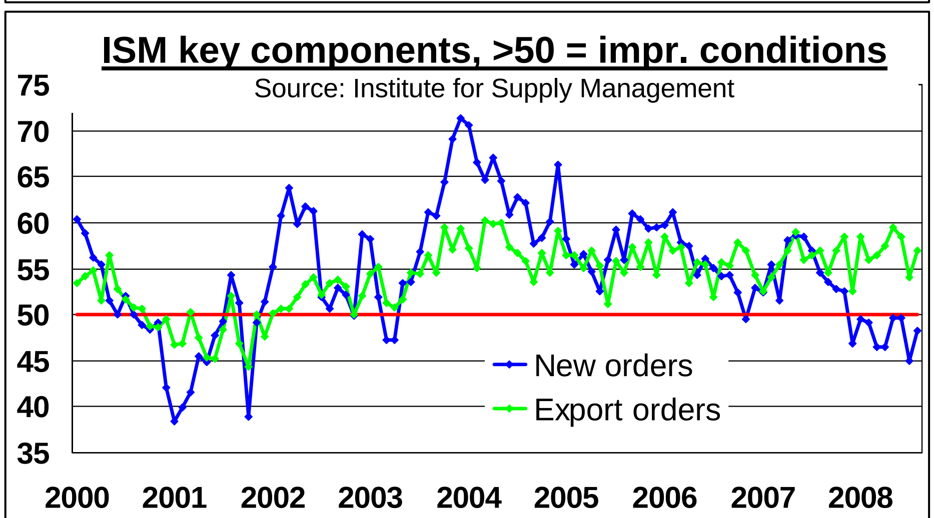
Budget Process Reform

- **OBAMA:** Will re-instate pay as you go (PAYGO) rules to restore fiscal discipline.
- **McCAIN:** Will make budget rules more balanced, require a 3/5 majority to raise taxes, and seek a line-item veto.

Source: The Committee for a Responsible Federal Budget

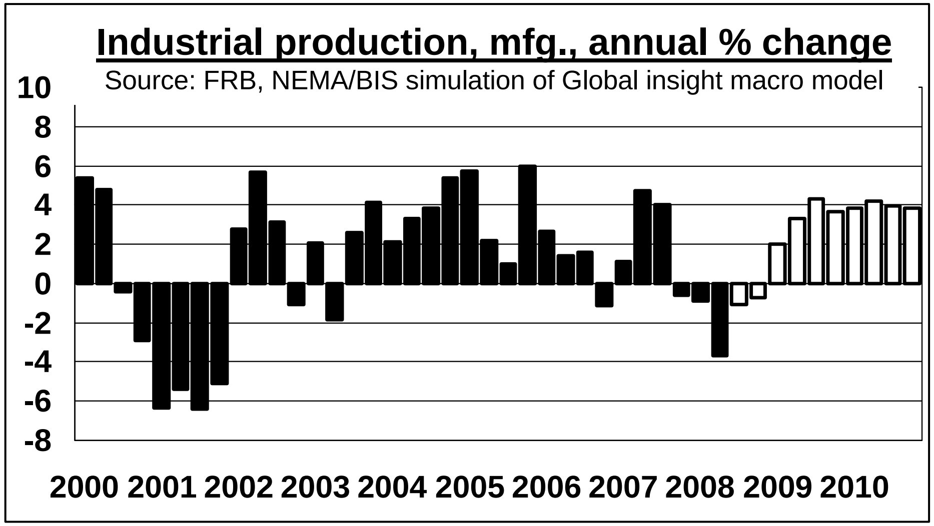
The bellwether ISM mfg. index is straddling the expansion-contraction line, but orders data leave cause for concern

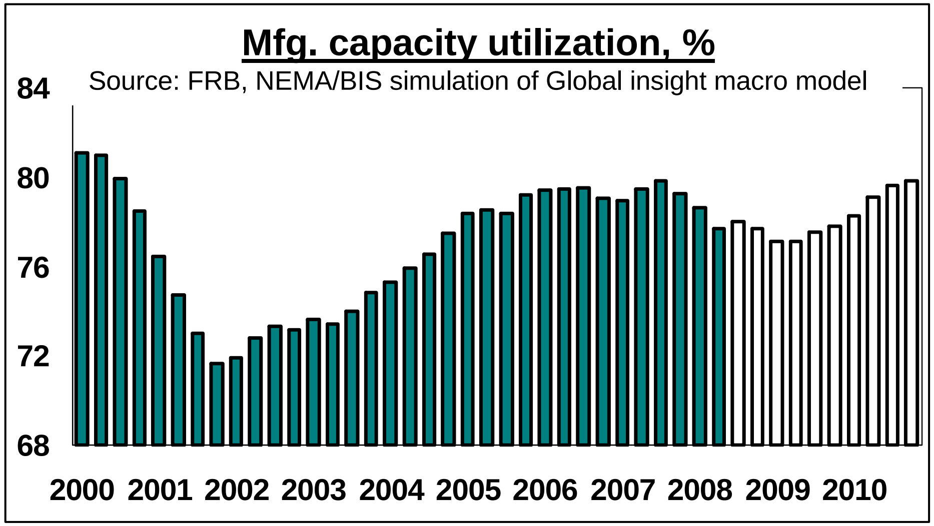




- The ISM manufacturing index was nearly unchanged in August, slipping to 49.9 from 50 in July
  - Since January the composite ISM has averaged 49.5, essentially “on the bubble” between expansion and contraction
- Reassuringly for future factory activity, the new orders component of the index rebounded from a large drop a month ago, posting a 3.3 point gain to reach 48.3
- The current role of exports in providing a “floor” for the manufacturing sector (and indeed, the economy at large) was again apparent from the August ISM data, as the export orders component climbed to 57

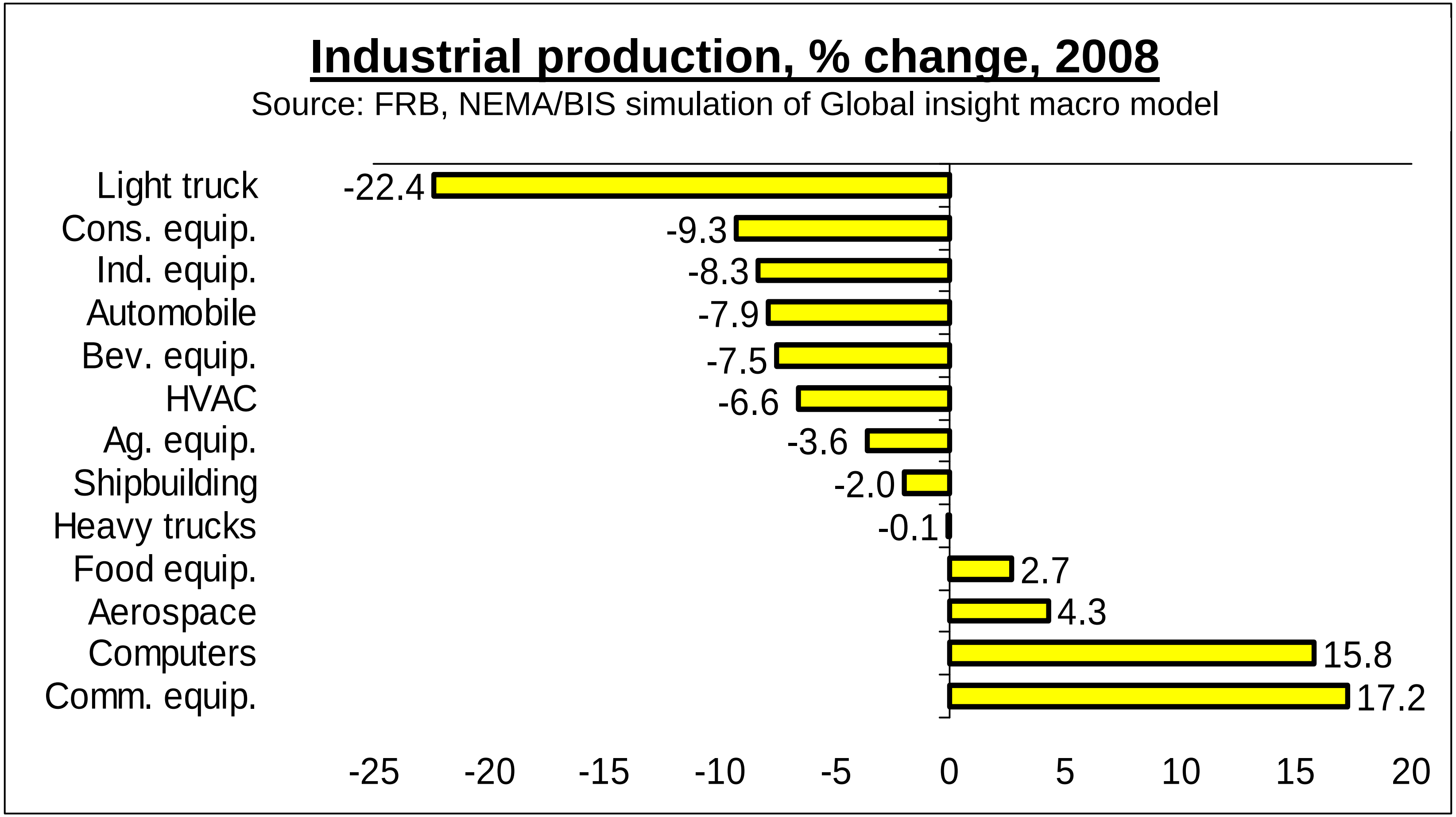
Manufacturing output is rebounding from a depressed Q2 level, but is likely to remain weak through early 2009



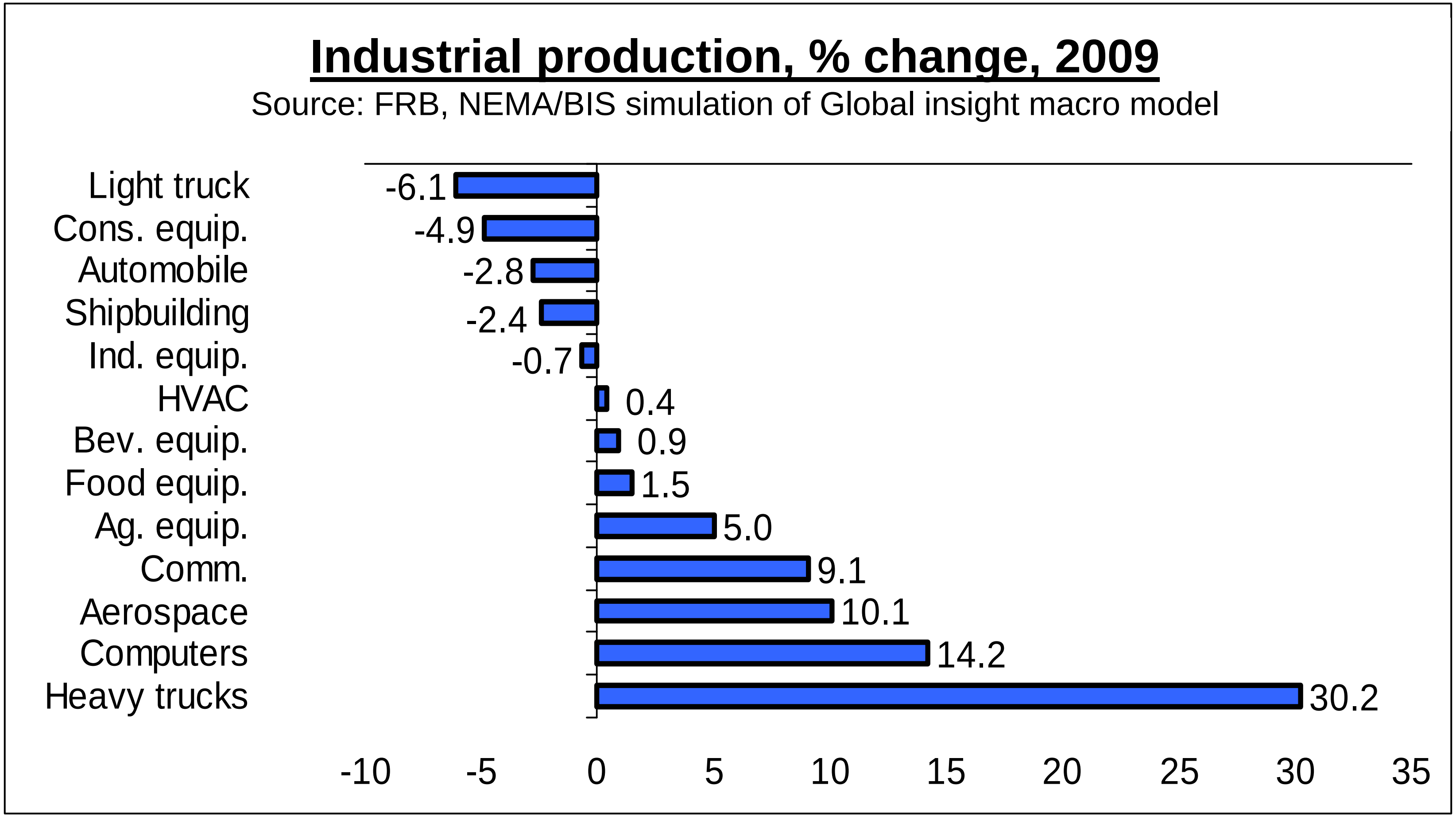


- Manufacturing sector industrial production climbed for a third straight month in July, rising 0.4% from June, but a substantial portion of July's sizable gain was due to the ongoing recovery from depressed levels of output attributable to an auto parts strike in the spring (which itself was a major factor behind the outsized decline recorded for the whole of Q2)
  - Looking behind these short term fluctuations reveals an environment of stagnation since late 2007, in line with the flat-to-declining performance suggested by the ISM
- The sluggish performance is likely to continue in the near-term thanks to the eroding domestic spending outlook
  - Export demand will continue to provide a base of support, but its upside is limited as the dollar has stabilized and foreign economic conditions are deteriorating

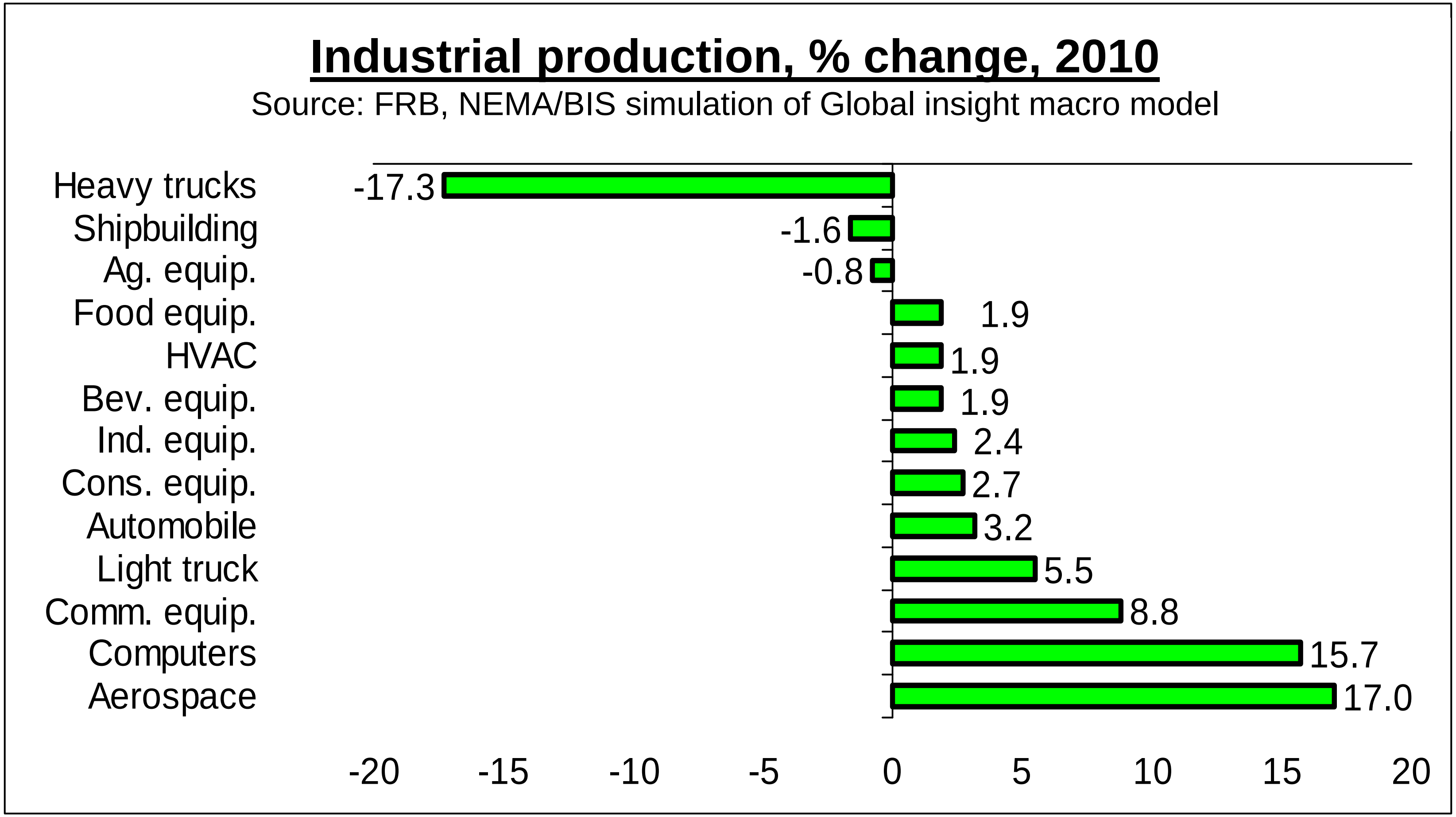
Automakers and construction/building equipment manufacturers are bearing the brunt of the slump



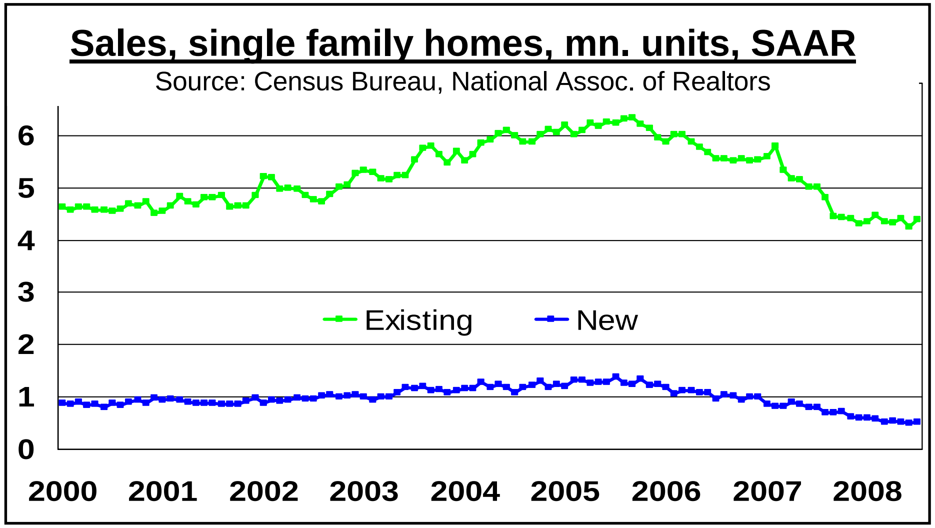
The best prospects in 2009 continue to be in export-heavy sectors such as aerospace and high tech equipment

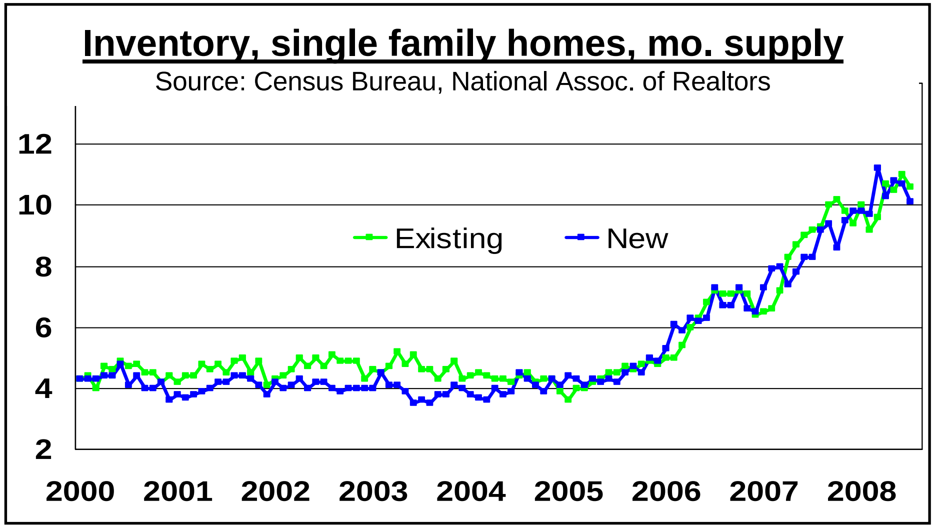


Return to trend economic growth by 2010 will bring widespread manufacturing gains



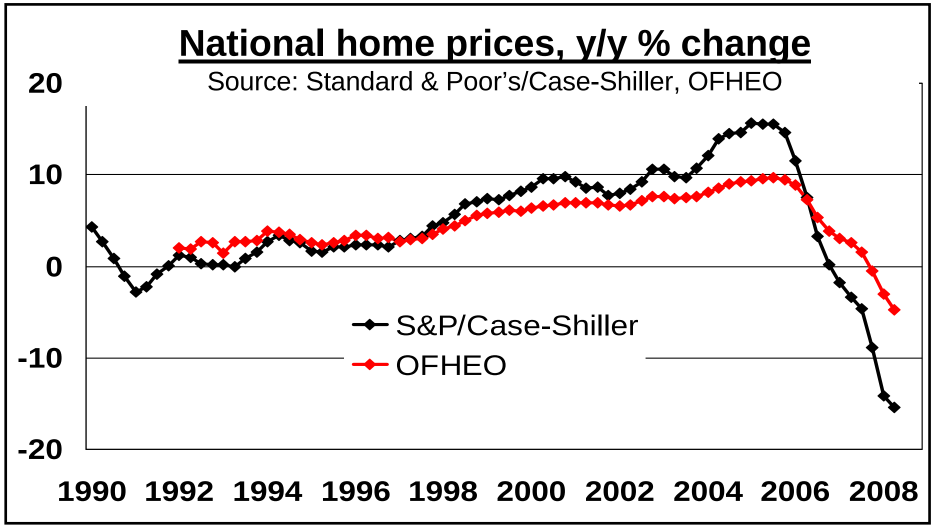
The housing supply imbalance has, at least for the time being, stabilized

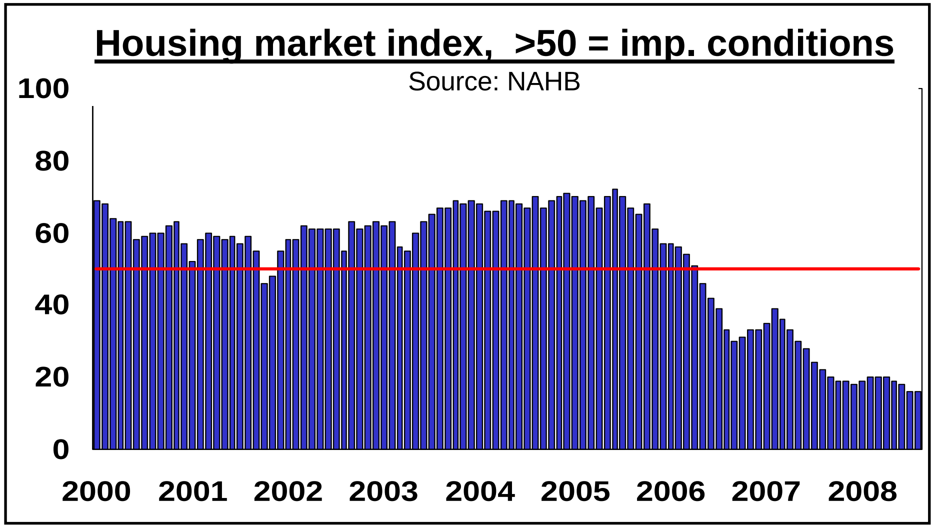




- Sales of both new and existing single family homes gained modest ground in July…
  - Existing home sales climbed 3% to just under 4.4 million units SAAR
  - Meanwhile, new home sales grew 2.4% to 515,000
- … and a common yardstick of inventories declined
  - Existing home inventories fell to 10.6 months supply from June's figure of 11 months, the highest since at least 1990
  - Meanwhile, the supply of new homes slipped to 10.1 months in July from 10.7 in June
- Though the inventory picture has steadied, it remains far from anything approaching a historical measure of balance
  - Indeed since 1990, existing home inventories have averaged 6.1 months supply, new homes 5.5 months

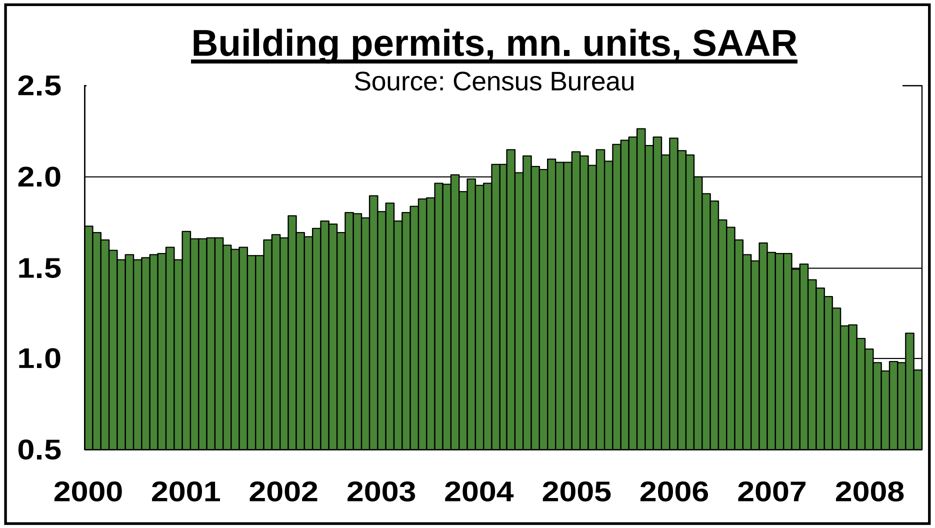
Yet to stabilize: home prices

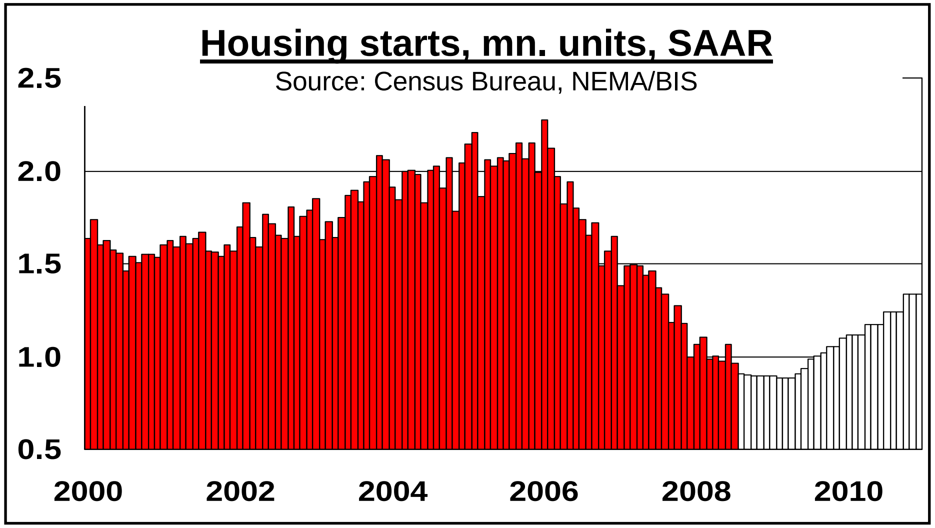




- The Case-Shiller U.S. National Home Price Index fell 15.4% y/y in Q2, following a 14.1% y/y Q1 drop
  - The Case-Schiller index is down nearly 20% from its peak of two years ago
- The OFHEO price index, which counts only homes purchased with a Fannie Mae or Freddie Mac conforming mortgage, was down a lesser, but still historic, 4.8% y/y in Q2
- Builder confidence in market conditions remained at an all-time low in July
  - The NAHB/Wells/Fargo housing market index held at a dismal 16 points for the second straight month

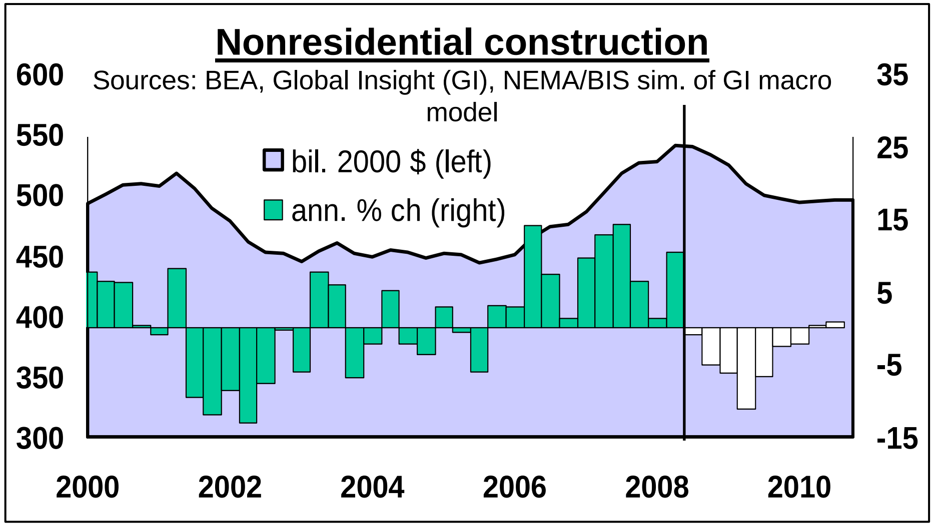
The forecast for the trough in housing starts has been pushed back to early 2009

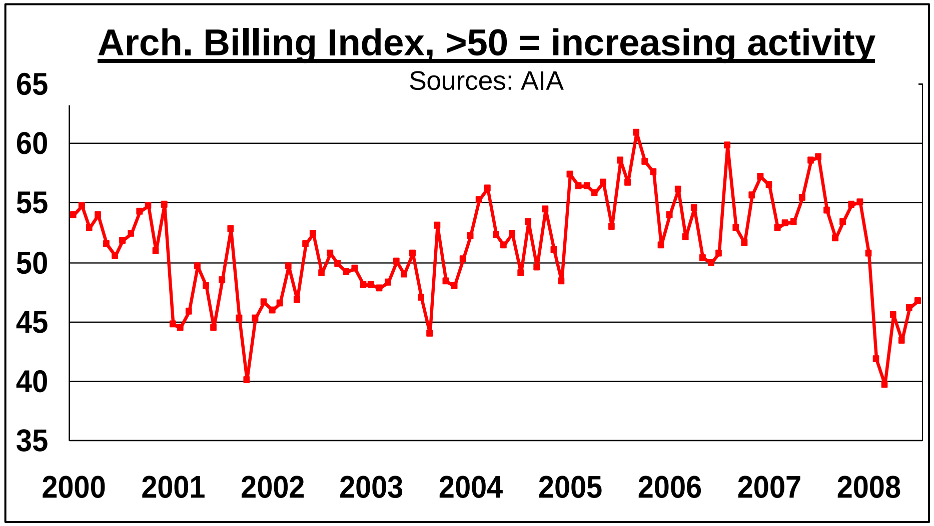




- Despite the signs of stabilization emerging in the market for new and existing homes, the sector is not out of the woods yet
  - Prices continue to plunge at record rates, stimulating demand, but also threatening more foreclosures in the months to come
  - Indeed, a large proportion of recent sales are reportedly due to banks disposing of foreclosed properties at cut-rate prices
  - The inventory overhang remains massive
  - Though above March's cyclical low as of July, permits for new starts, a leading indicator of future building activity, continue to struggle
- While the worst declines are behind us, home builders are expected to cut further in response to extremely bearish price and inventory signals
  - Housing starts are expected to post modest declines through 2009 Q1
  - By late 2009, inventory drawdown and demand stemming from underlying demographic trends will lead to renewed gains
  - The recovery, though, will likely be slow and tempered by skittish and risk-averse financial markers

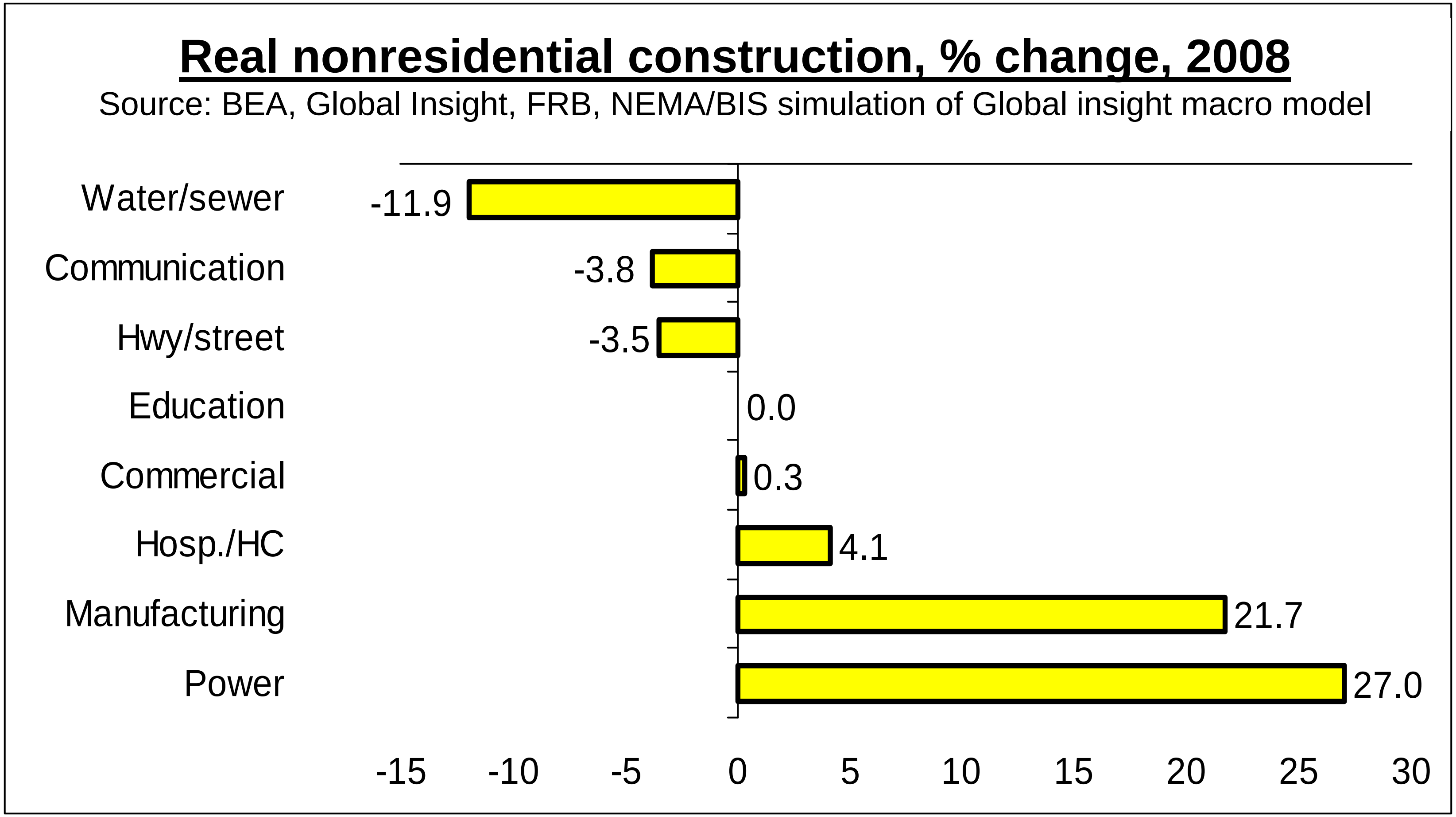
Nonresidential construction was surprisingly strong in the first half of 2008, but signs point to a downturn



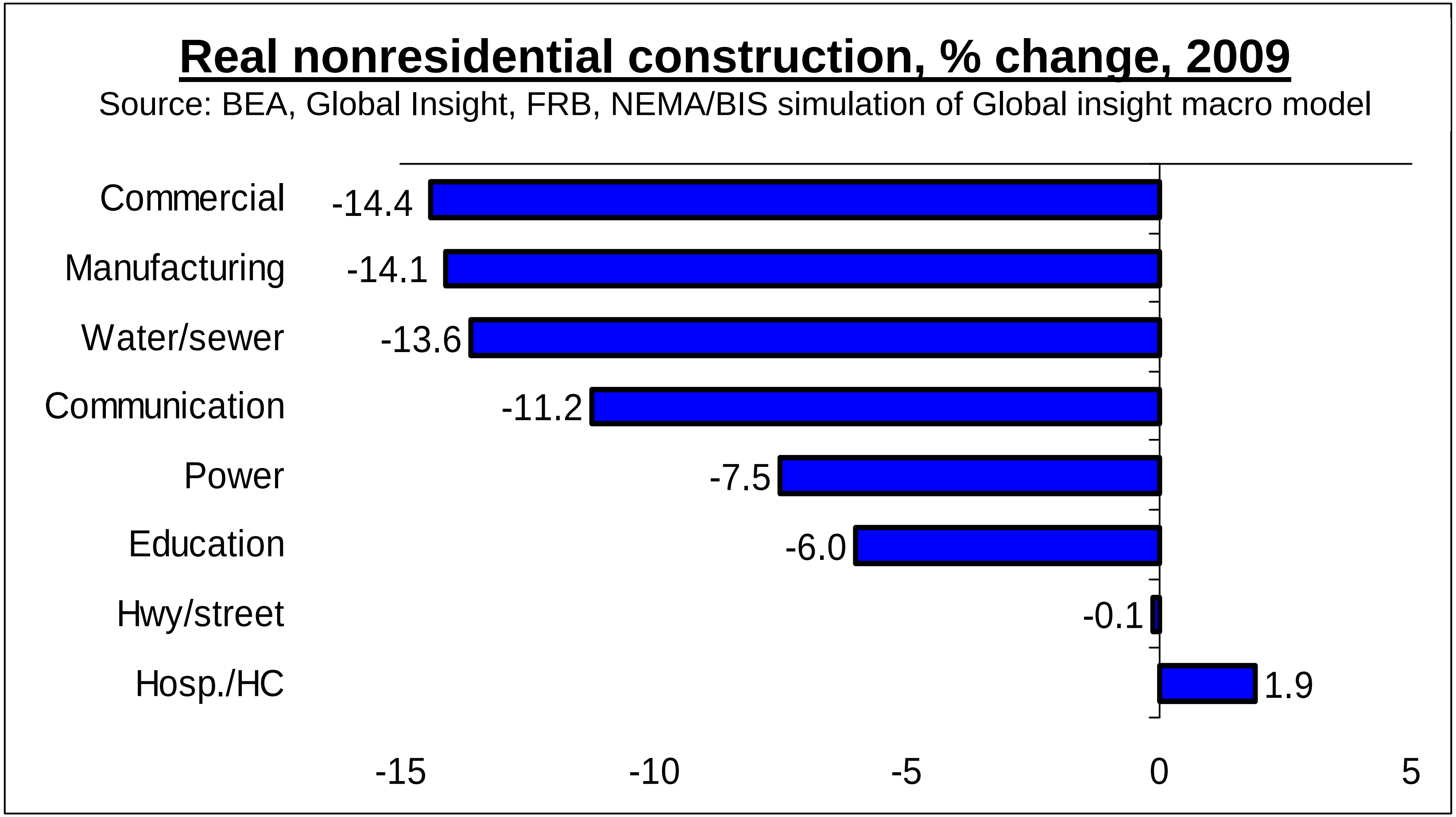


- The latest data show the first half of 2008 was far stronger than earlier thought, especially surprising given recent rapid increases in materials costs
  - Total real nonresidential construction (including public sector activity) grew by more than 10% SAAR in Q2, following 1%-plus growth in Q1
  - Private nonres. construction far outpaced the total, with gains of 8.6% and 13.7%, respectively
- Nonetheless, real construction outlays are expected to trend progressively downward beginning in the second half of 2008 as the broader economy weakens
  - Billings by architecture firms, one leading indicator of nonresidential building activity, were in contractionary territory for a sixth month in a row in June

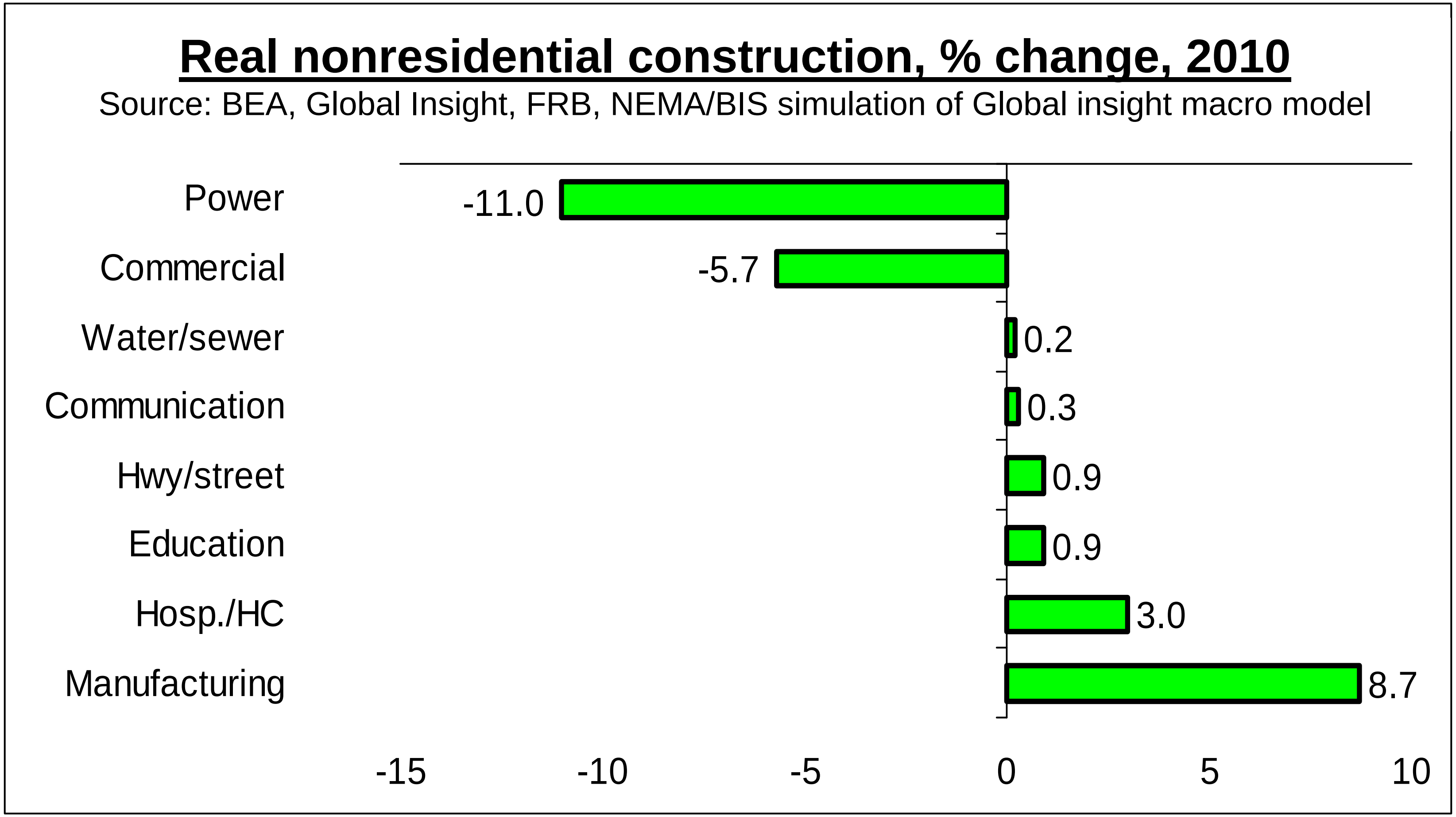
Infrastructure spending is sliding as state and local government budgets groan



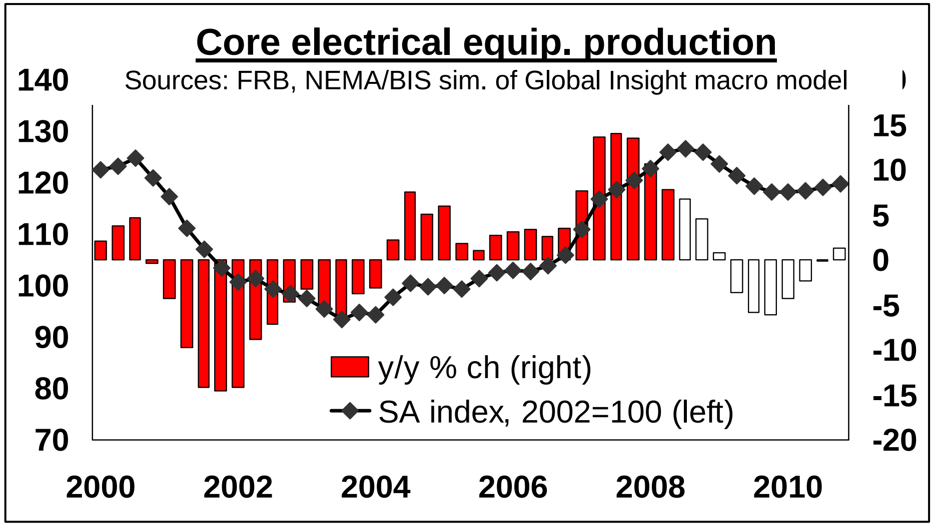
Most types of nonresidential construction expected to contract in 2009, with commercial leading the way

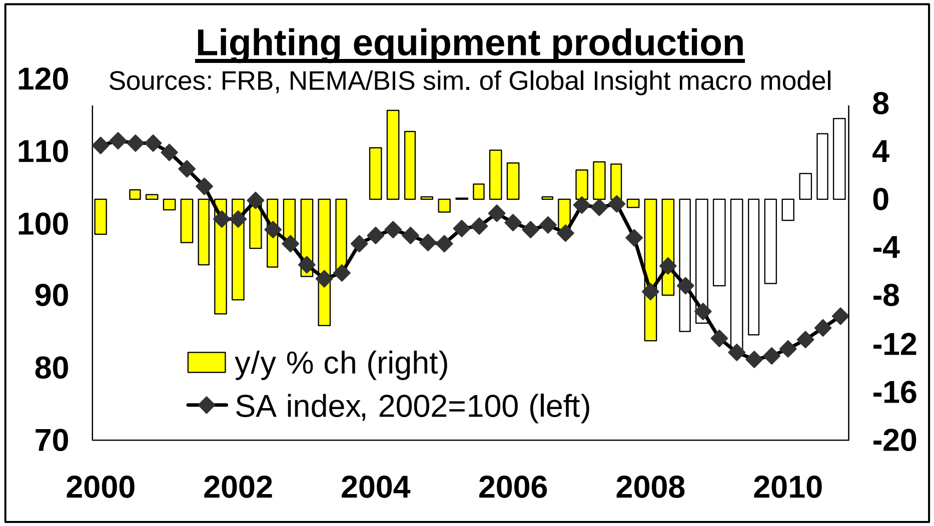


Construction of manufacturing facilities is seen leading the rebound in 2010



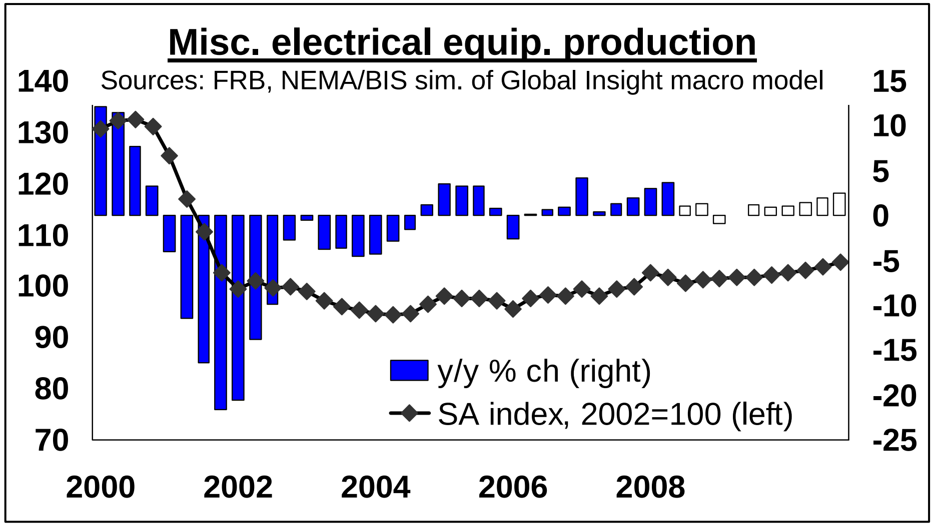
Near-term declines seen for both core electrical and lighting equipment production

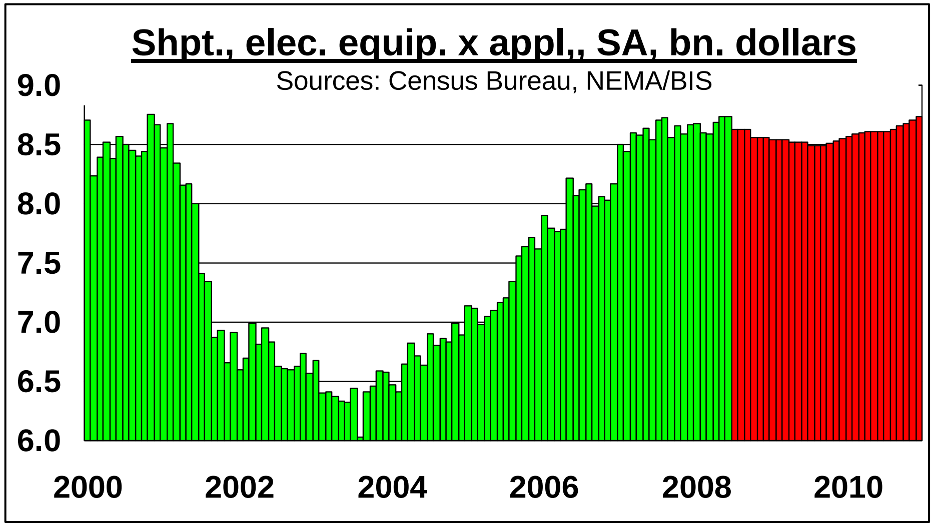




- Following consecutive strong gains in May and June, production of core electrical equipment dropped in July, declining 0.4% m/m
- Though the heretofore robust expansion in core persisted much longer than anticipated, anemic end-market activity continues to suggest a modest pullback in the second half of 2008
  - The expected downturn in nonresidential construction will leave exports the sole strong growth driver in the near-term
- Despite a blip upward in Q2, lighting equipment output remains on a downward near term trajectory thanks to ever-growing import penetration and weak domestic construction activity

Aggregate shipments are expected to see a modest downturn in the near-term





- Production of misc. electrical equipment posted solid growth in the first half of 2008, thanks to steady export demand and strong growth in the domestic nonresidential market
  - The poor outlook for construction activity, though, suggests weak prospects moving forward
- Nominal dollar shipments of aggregate electrical equipment have largely leveled off since mid-2007
  - Shipments from January to June averaged only 1.4% higher relative to the same period in 2007
  - Exports should help buoy shipments in the near-term, but the negative impact of the sagging housing and manufacturing end-markets will put downward pressure on domestic demand through 2009

