03 August 2009

# Research

## US: Auto sector to boost H2 growth

- **Since the onset of the recession in late 2007, US auto and light truck sales have plummeted to historical lows. However, going into H2 09, there are several good reasons to believe that motor vehicle production could be one of the main drivers of GDP growth.**
- **Demand for vehicles is set to recover in H2 09 – perhaps strongly. Pent-up demand could be unleashed very quickly as the government's CARS incentive programme is now kicking in. On top of this, healing credit markets and tax breaks should support spending power.**
- **The inventory cycle dynamics are strong in this part of the economy. Just to stabilise motor vehicle inventories at the current very low level of demand, production needs to be ramped up 20-25%.**
- **Inventory dynamics in the car sector alone could contribute about 0.75-1.00pp to annualised GDP growth in H2 09 while increased demand could add a further 1.0-1.5pp. In that case, the auto sector will turn a 0.50pp headwind into a 2.00-2.25pp tailwind to GDP in H2 09, i.e. a net boost of 2.50-2.75pp.**
- **There is a chance that most of the boost will be delivered in Q3. Hence, the auto sector plays an important role in our expectation that the US economy will return to 3% growth rates already in the current quarter.**

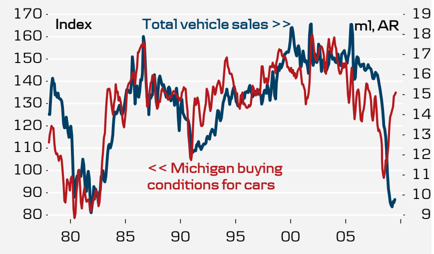
### Rising from the ashes

The collapse in the US auto sector has taken sales back to levels not seen since the early 1980s. Since late 2007, total light vehicle sales have plunged by 38% and total demand for domestic motor vehicles is down by 35% as measured in constant prices. Relative to the size of the economy, demand for cars is now at an historical low.

The downturn in light vehicle sales since late 2007 has been driven by a potent mix of high energy prices in H1 08 followed by seizing credit markets and skyrocketing unemployment. However, even accounting for these factors, demand is unusually low. It is likely that the financial and economic problems at carmakers and the unusual degree of consumer uncertainty have added to the slowdown in the sales rate.

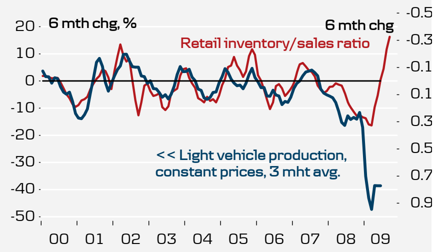
Although many negative factors remain in play, the overall mix has become less negative than earlier this year. Indeed, there are several reasons to believe that demand for autos will recover over the coming months.

**Appetite for cars is returning**



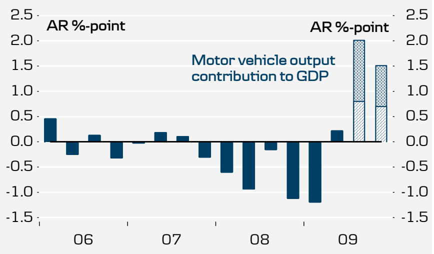

*Source: Ecowin and Danske Markets*

**Production needs to be ramped up**




*Source: Ecowin and Danske Markets*

**This will boost GDP in H2**




*Source: Ecowin and Danske Markets*

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### Incentives

On 24 June 2009, the US government signed the Car Allowance Rebate System (CARS) into law. The programme, nicknamed 'Cash-for-clunkers', makes car buyers eligible for a credit of USD3,500 or USD4,500 if they trade in a less fuel-efficient car when buying a new more fuel-efficient car. The programme details were settled by late July, but cars bought since 1 July are eligible (see CARS.gov for more information). The programme will run until 1 November or until the funds are exhausted whichever is sooner.

Government incentive scheme is boosting auto demand

As the programme was on the table for several months before actually being introduced, car buyers may have delayed purchases in anticipation of getting a better deal. This could be one reason why car sales in the US have failed to pick up so far this year.

Car buyers might have delayed purchases to secure a better deal

The programme is capped and initially only USD1000m had been allocated. However, a few days after the final programme details were settled and made public, the funds were exhausted. In response the House has already approved an emergency bill, which extends the programme by another USD2000m. The Senate is expected to vote for the bill this week and the White House has announced that the programme will continue without interruption.

Send more money, please!

The programme will now cover 0.67-0.86m car deals. If it turns out that the additional USD2000m of funds is exhausted before the end of August, it will boost annualised August sales by 8-10m to a little below 20m AR. However, the effect will be temporary.

Potential to lift August sales to about 20m annualised

Experience from European countries suggests that incentive schemes can have a major impact – even in environments of soaring unemployment rates. The most positive examples are Germany and Italy where car sales are up by around 50% on a seasonally adjusted (our own adjustment) basis following the introduction of such incentive schemes.

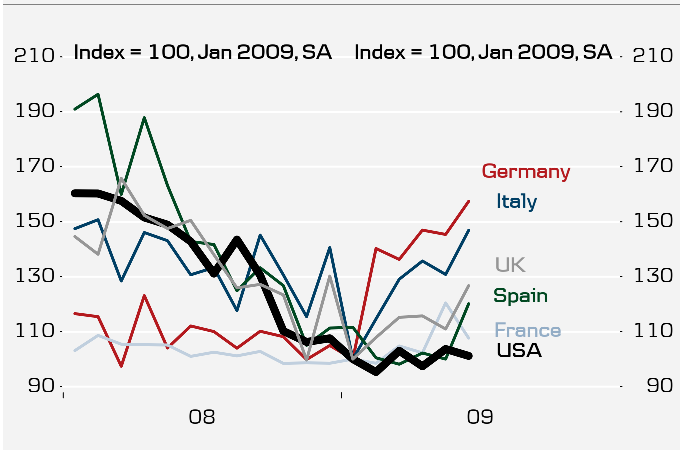
Incentive schemes have had a significant impact in some European countries

### Pent-up demand

While the cash-for-clunkers will only act to boost sales temporarily, a stronger and much more persistent force is in play. Light vehicle sales per household have reached a record low level, suggesting that a lot of demand has been and is being pent up. Indeed, annual light vehicle sales run far below any reasonable estimate of the equilibrium sales rate (i.e. the sum of the replacement rate and demographic sales rate), which we believe is around 16m annual sales. Hence, car sales almost need to double to bring sales back to equilibrium. Although this could take years to materialise fully, it implies a significant catch-up in car sales when the economy turns.

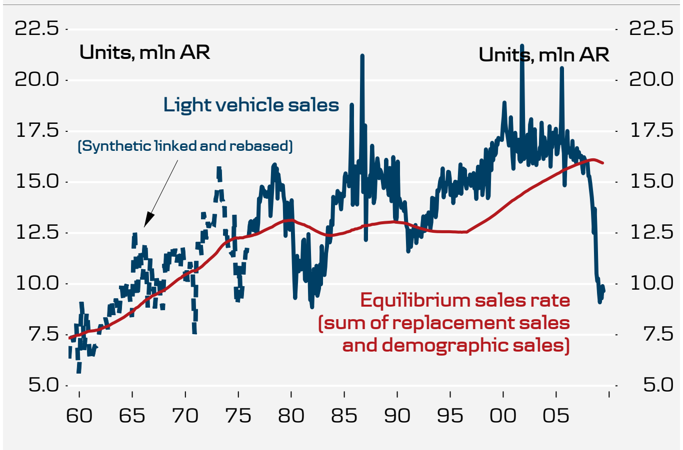
Demand is substantially below any sustainable equilibrium...

**Car sales up significantly in Europe on incentives**




*Source: Ecowin and Danske Markets*

**Demand is being pent up**




*Source: Ecowin and Danske Markets*

Historical evidence suggests that the initial move up can be quite forceful. For example, coming out the 1982 recession, unit light truck sales jumped by about 37% in a year – and back then auto demand had been suppressed by less than today.

...usually this implies a significant pick-up in sales in the following years

**Credit**

Another positive factor is that credit markets are looking much better than six months ago. This has slowly begun to show up in car lending rates – albeit spreads remain wide. However, this might partly be explained by extremely weak economic conditions (i.e. rising unemployment and high delinquency rates).

Credit markets are healing and auto loan rates are creeping lower

Further, the Fed's TALF programme should ensure that the credit markets will be supplied with capital for car loans. Indeed, supplying a car loan seems very attractive as a three-year + auto ABS can be funded at the Fed at the three-year USD swap rate + 100bp, i.e. several percentage points below the current auto lending rate at commercial banks.

TALF programme is supplying funding to the auto sector

Finally, the recent Senior Loan Officer survey suggests that the pace of credit tightening is slowing on consumer loans in general.

**Summary**

We think it is very likely that car demand will pick up during H2 09 – perhaps even sharply. With increasing buying confidence for cars (see chart on the front page), pent-up demand, easier access to credit and the CARS incentive programme, we think that an increase in light vehicle demand of around 20-30% over H2 is realistic.

Demand set to pick up in H2 09

To judge how the dynamics would be in a 'normal' situation, we have modelled the annual growth rate in light vehicle sales. The model includes real income growth, car lending rates and the lagged deviation of the sales rate from its sustainable rate. The model output suggests that car sales, disregarding any incentive programmes, should pick up significantly over H2 – mostly due to pent-up demand. In terms of levels, the model forecasts a sales rate of around 13m AR by end-2009 and around 15m AR by end-2010 (see chart below).

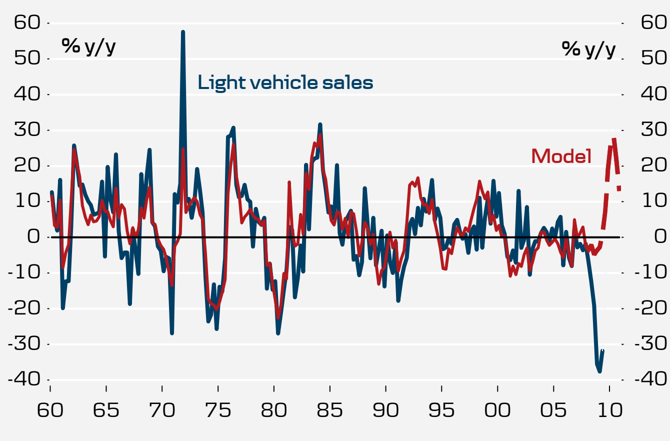
Our model suggests a substantial pick-up in car sales in H2, even with no incentive scheme

## Supply-side dynamics very favourable

On top of the rise in demand production needs to be ramped up 20-25% to stabilise inventories – we think most producers will attempt to do this before year-end.

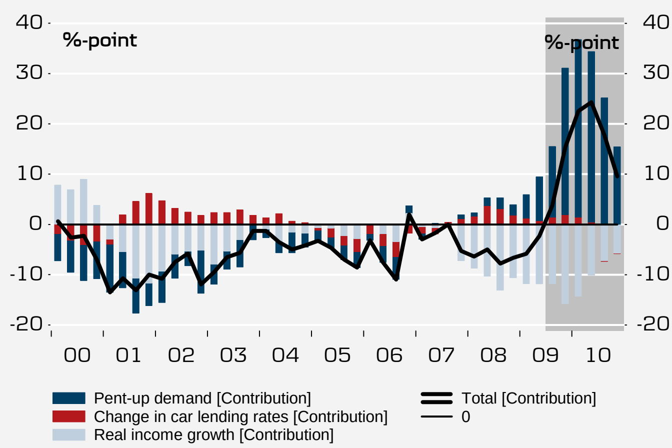
Production needs to be ramped up significantly to stabilise inventories...

**A simple model for light vehicle sales**




Source: Ecowin and Danske Markets

**Contribution from explaining factors**




Source: Ecowin and Danske Markets

Indeed, information available on weekly auto assemblies already suggests that production is already being ramped up significantly. Hence, we would expect to see evidence of this in the industrial production numbers for July.

...and this is already happening

Even with demand remaining flat, production needs to increase by 20-25% (as measured in constant prices by NIPA) from current levels to stop inventories from depleting. Hence, inventory dynamics could easily contribute by around 0.75-1.00pp to annualised GDP growth.

Even with no improvement in demand car production should boost GDP growth by 0.75-1.00pp

## GDP impact could be substantial

The joint impact from inventory and demand dynamics on H2 GDP could be substantial. A 20-30% rise in unit sales in H2, which we do not find unrealistic, would add around 1.5pp to GDP growth over H2.

A 20% jump in unit sales could add 1.5pp to GDP

In such a scenario, inventory and demand dynamics would deliver a combined average contribution of 2.00-2.25pp to quarterly GDP growth rates over H2, with the major boost likely to arrive in the current quarter. Indeed this is a significant boost from an industry which only makes up 1.5% of nominal GDP.

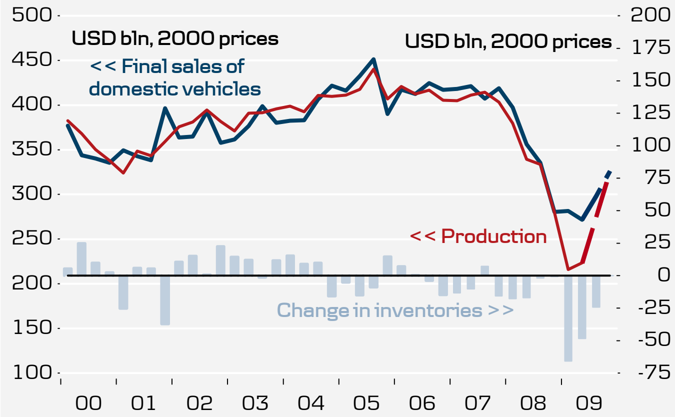
This would add a total boost of 2-2.25pp to GDP growth in H2

**Senario analysis**

| | | | Final sales unch. (36% off 07 peak) | | up 10% (29% off 07 peak) | | up 20% (23% off 07 peak) | | up 30% (16% off 07 peak) | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 2009-I | *2009-II* | 2009-III | 2009-IV | 2009-III | 2009-IV | 2009-III | 2009-IV | 2009-III | 2009-IV |
| **Motor vehicle output** | 215900 | 223400 | 247600 | 271800 | 261190 | 298980 | 274780 | 326160 | 288370 | 353340 |
| **Contribution to GDP growth, AR** | -1.0% | *-0.6%* | 0.8% | 0.7% | 1.3% | 1.2% | 2.0% | 1.5% | 2.7% | 2.0% |
| **Final sales of domestic product** | 281500 | 271800 | 271800 | 271800 | 315000 | 298980 | 298980 | 326160 | 312570 | 353340 |
| **Change in private inventories** | -65600 | *-48400(E)* | -24200 | 0 | -53810 | 0 | -24200 | 0 | -24200 | 0 |

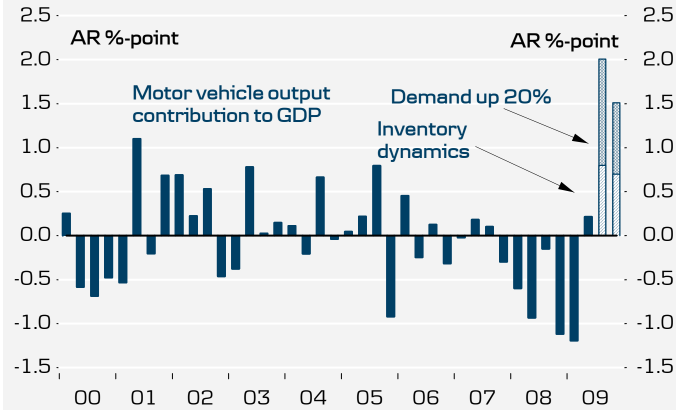
*Source: BEA and Danske Markets*

Scenario with demand up 20% and stable inventories by Q4




*Source: Ecowin and Danske Markets*

Car sector set to boost H2 growth




*Source: Ecowin and Danske Markets*

## Disclosure

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First date of publication

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