Jürgen Stark: Contributions of central bank statistics in a global context

Speech by Mr Jürgen Stark, Member of the Executive Board of the European Central Bank, at the World Statistics Day, Frankfurt am Main, 20 October 2010.

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Ladies and gentlemen,

The global crisis has demonstrated that high quality statistics are essential. The crisis underscored the need for statistics to keep pace with changes in the financial landscape. These changes can transform the nature of financial intermediation and the transmission of macro-financial shocks in the economy. Let me give you a few flashlights of how the global harmonisation of statistical concepts would support higher quality analysis.

Global inflation rates have rebounded from their bottom, but they have remained subdued. However, these measures of inflation are not fully comparable. Data for the euro area and the UK (as for the whole European Union) refer to the Harmonised Indices of Consumer Prices (HICPs) calculated according to a harmonised methodology and a single set of definitions. The US and Japan headline rates of inflation refer to their national ways of compiling Consumer Price Inflation.[1] Both countries also compile a price index that comes closer to the European Harmonised Indices of Consumer Prices.

One of the main differences between the two types of indices is the treatment of owner occupied housing costs.[2] The HICP does not cover the expenditure for buying a house or a flat, as it is methodologically very demanding to agree on one method given the different national circumstances. Data collection is complex and some argue that buying a house is an investment rather than consumption. Both the headline inflation measure in the US, as well as in Japan, do include a measure of owner occupied housing. Comparing the euro area HICP (1.6% for August) with the US CPI (1.1%), it appears that inflation is lower in the US. Taking the harmonised measure, the HICP, US inflation was higher (1.9%). I emphasis here that harmonisation for international comparability needs to be weighed against the specific needs for policy makers. The HICP provides the best measure for comparisons of consumer price inflation and for assessing price convergence and stability for the purpose of monetary policy – the HICP is hence used to measure the success of the ECB's aim to achieve price stability.

Excessive debt and leverage have been at the core of the financial crisis. This slide shows household debt levels in the US, the UK and the euro area, taken from financial accounts statistics. These statistics are part of the national accounts and provide, in principle, a good framework for international comparison of financial data. However, US data depart from the national accounts standards in some areas which makes them not fully comparable; for instance, the US household sector is narrower than in the other economies.[3] To some extent, the data can be adapted to make them more comparable: in the slide, the US data on income have been adjusted to better conform to the other two economies' income data.[4]

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1 For the US, the headline figure is the "All Items Consumer Price Index for All Urban Consumers (CPI-U)" reported by the Bureau of Labor Statistics, whereas the "General Consumer Price Index" in Japan is defined by the Japan Statistics Bureau.

2 Other differences include for instance the coverage of households: Whereas the HICP includes the rural population in its scope, the US CPI only covers urban population.

3 In the euro area and the UK, sole proprietorship and partnership without independent legal status are included in the households sector, but they are included in the non-financial corporations in the US.

4 Subtracting interest paid from the US measure of income, inter alia.

These caveats notwithstanding, there is a remarkable difference in household debt levels. The greater home ownership in the US and the UK compared with the euro area due to a more developed mortgage market has certainly contributed significantly to the higher levels of household debt in these countries.

This chart illustrates a comparison of total household wealth. In this context, it is my pleasure to announce that the ECB will publish for the first time quarterly data on household wealth in the next statistical press release "Euro area financial and non-financial developments" to be issued on 28 October 2010. The proportion of financial wealth to total wealth is much higher in the US, mainly because of the higher weight of private pension schemes, and it is also more volatile, owing to the higher weight of equity assets in total wealth. The large drop in equity prices and house prices in some countries and in residential investment is reflected in a pronounced decline in the ratio of wealth to disposable income, particularly so in the U.S. Moreover, in the US, the gap between total wealth and financial wealth has narrowed substantially.

I will turn now from a typical lender, the household sector, to the typical borrower, the non-financial corporations' sector. The main difference between the euro area and the US is the weight of bank financing. In the US, the recourse to equity, debt securities and loans channelled outside the banking sector is much more widespread than in the euro area. One can assume that during times of robust economic growth, the relative weight of market financing decreases, while in the most recent period of financial distress it has increased and substituted for bank financing.[5]

This slide provides a picture of the development of bank loans and the most important part of loans by other financial intermediaries: securitised loans. The slide for the euro area only provides an approximation to securitised lending, assuming that all OFI loans are securitised loans. In the near future, ESCB statistics on loan securitisation vehicles will enable a more detailed breakdown and thus a better comparison with the US. In terms of funding sources, securitised lending was an alternative source of financing to deposits collected from the public: banks obtained the funds for new lending through bonds issued by securitisation vehicles. While there is a significant drop in lending in both the euro area and the US and financing by banks has now turned negative, it is striking that a dramatic drop of securitised lending by ABS issuers started at the end of 2007.

Let me now move to a subject which is a key determinant of the euro area's international competitiveness – productivity. Productivity growth impinges on the monetary policy of the ECB: it has an influence on potential output, unit labour costs and potential risks to price stability. In response to the crisis, the gap in labour productivity (per person) between the US and the euro area has widened significantly. As evident from next slide, this is partly due to the use of shortened hours' schemes in a number of euro area countries had a significant impact on developments in productivity per head.

While shortened working hours were also used extensively in the United States over the course of the crisis, US firms were also much more likely to lay off workers. Along with the relatively larger contraction in economic activity seen in the euro area, this helps to explain the more significant fall in productivity growth per person employed in the euro area than in the US, over the course of the recession.

At a sectoral level, the euro area's recent favourable labour productivity performance has been mainly driven by positive cyclical developments in "industry excluding construction". In contrast, productivity growth in services has not improved much, despite a few modest, but nevertheless encouraging, signs in the financial and business services sector.

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[5] One explanation may be that in periods of uncertainty the large well-known enterprises with good ratings continue to attract funds at favourable conditions and may then channel funds to smaller enterprises via intercompany loans or via trade credits.

It would, of course, be useful to compare productivity developments in a wider range of sectors in the euro area with those of the United States. But this is not yet possible, as quarterly productivity developments are not produced at the same sectoral breakdown in the US. (The US disaggregates only to the non-farm business sector and the manufacturing sector.)

The main comparable indicators used for fiscal policy analysis are the general government deficit, expenditure and debt. Harmonised deficit figures show strong deficit deterioration in the euro area and in the US for the last two years. These were driven by sharp declines in tax revenues as well as expansionary fiscal policies. Japan[6] displayed a deficit between 6 and 8% of GDP for most of the early 2000s as a consequence of the Japanese crises in the 1990s, with some improvement for the period 2006–2008. In 2009, the fiscal outlook deteriorated again with an estimated deficit of around 7% of GDP.[7] Again, a direct comparison is not possible without adjustments,[8] due to methodological differences in their compilation.[9]

The expenditure-to-GDP ratio[10] indicates the size of the government sector. Comparable figures show a convergence of expenditure levels in the US and Japan, at around 37% of GDP. The relative importance of the government sector in the euro area is much higher, with a current expenditure ratio just above 50% of GDP. When interpreting these figures, an important caveat concerns the institutional differences between the social security of the countries. Mandatory private insurance schemes for pensions, unemployment or health care reduce the headline figures for government expenditure in the US. State contributions to compensate for households' voluntary payments into social security funds increase government expenditure in the euro area.

Comparable figures show an increase in the debt-to-GDP ratio[11] between 2007 and 2009 in the euro area and the US, amounting to 12.8 percentage points and 19.2 percentage points respectively. In Japan, the government debt ratio stood at 162.2%[12] of GDP in 2008 after rising more than 40 percentage points in the last decade. This is due to the accumulation of high deficits and low GDP growth.

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6 It is straightforward to compile government data for Japan according to the European definition on the basis of the Japanese national accounts as they are based on the international System of National Accounts (SNA), which is compatible with the European System of Accounts (ESA 95).

7 According to the European Commission forecasts (Spring 2010), the deficit-to-GDP ratio for 2009 is projected to be 6.9%. It is important to highlight that no comparable deficit figures for Japan are available for 2009 yet. This is due to the fact that Japan releases national accounts data of the year t-2 in the year t (2009 data will be available only by the beginning of 2011).

8 In terms of deficit, the main methodological discrepancies between the US methodology and the European standards are mainly related to the sector delineation (public corporations are included in the US government sector), the recording of some military expenditures and the inventories held by governments.

9 The euro area deficit and debt indicators are based on the European System of Accounts (ESA95) and on the Excessive Deficit Procedure (EDP) concepts. In Japan, the deficit and debt indicators are compiled according to the SNA2008 concepts. The US deficit data are based on the National Income and Products Accounts (NIPA) methodology, which deviates to some extent from the SNA2008, while the US debt data are based on the Flow of Funds methodology used by the Federal Reserve.

10 Government expenditure covers social payments, subsidies, other current transfers, interest, compensation of employees, intermediate consumption and capital expenditure.

11 "EDP debt" definition.

12 One should highlight that the Japanese government holds financial assets worth around 90% of GDP [2008] (with a high percentage held by its social security system – around 40% of the total), which represent a buffer from a solvency perspective. This yields a net government debt-to-GDP ratio in Japan of around 86% (2008). Net debt is calculated from the Japanese's balance sheet data, as the difference between the government liabilities (177.4% of GDP in 2008) and the financial assets (90.9% of GDP in 2008).

Progress and plans to fill gaps

These examples illustrate the importance of internationally comparable statistics. The statistics should only reflect differences in economic developments and the impact of the underlying phenomena. They should not be clouded by differences in statistical methodology. In close cooperation with statisticians globally, the ECB is contributing to the G20 initiatives[13] to provide harmonised and transparent global financial statistics in real time. These initiatives had significant input from the ECB and were welcomed recently also by the International Monetary and Financial Committee of the IMF Board of Governors.[14]

"Statistics may be defined as a body of methods for making wise decisions in the face of uncertainty." ***W.A. Wallis***[15]

Globalisation has increased this uncertainty. Globalisation continues to impact decisively on statistics and there is no doubt of the merits of comparable statistics. We need globally comparable statistics. And, there must be investment in closing gaps and enhancing comparability of statistics at the global level. There is a global momentum and we must all be part. The World Statistics Day is an excellent occasion to give a new impetus to this momentum.

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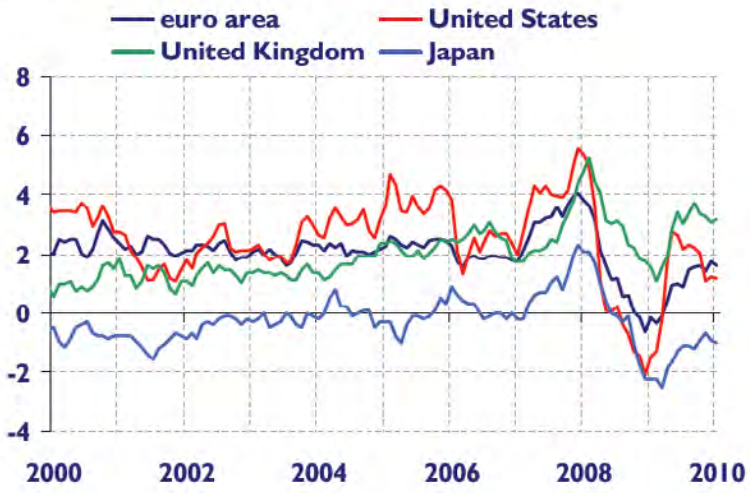
[13] Please see, Progress report on the "The Financial Crisis and Information Gaps" prepared by the IMF Staff and the FSB Secretariat, May 2010, at *http://www.financialstabilityboard.org/publications/r_100510.pdf.*

[14] Please see: http://www.imf.org/external/np/sec/pr/2010/pr10379.htm.

[15] President of the University of Rochester, 1962–1970; United States Under Secretary of State for Economic Affairs 1982–89.

Slide 2. Global inflationary pressures have remained subdued

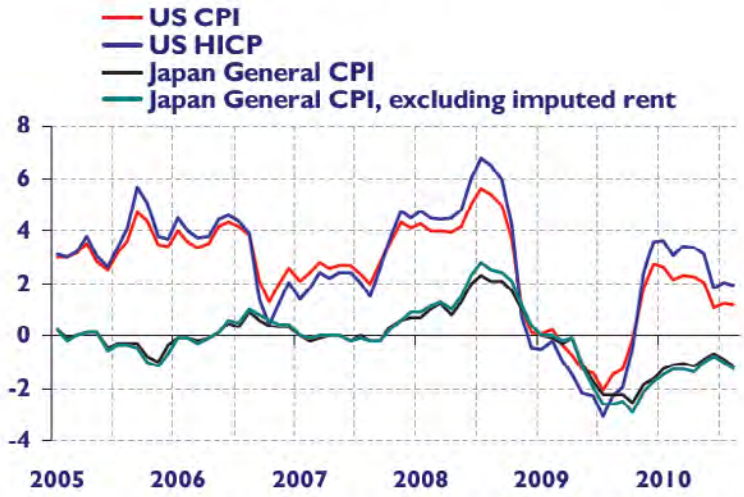
Overall consumer prices
(annual percentage changes; monthly data)



Source: BIS and Eurostat.
Note: Latest observation refers to August 2010. HICP for the euro area and the United Kingdom; CPI for the United States and Japan.

Slide 3. Main difference between HICP and CPI: treatment of owner occupied housing

Inflation for United States and Japan, different definitions
(annual percentage changes; monthly data)

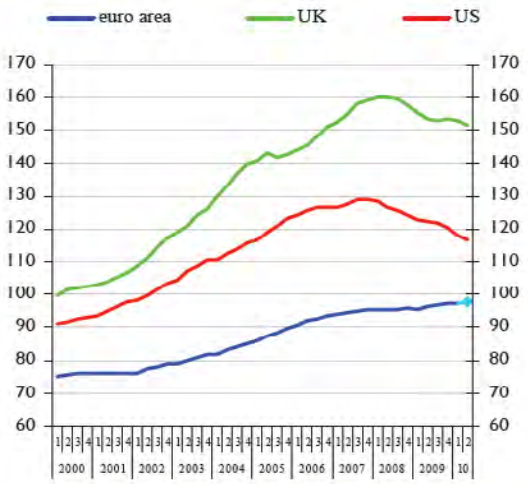


Source: Bureau of Labor Statistics and Bloomberg.
Note: Latest observation refers to August 2010.

Slide 4: Household debt: EA, US and UK

Household debt

(as a percentage of disposable income)*



Financial accounts data as most comprehensive measure for international comparison.

However no full comparability with US data:

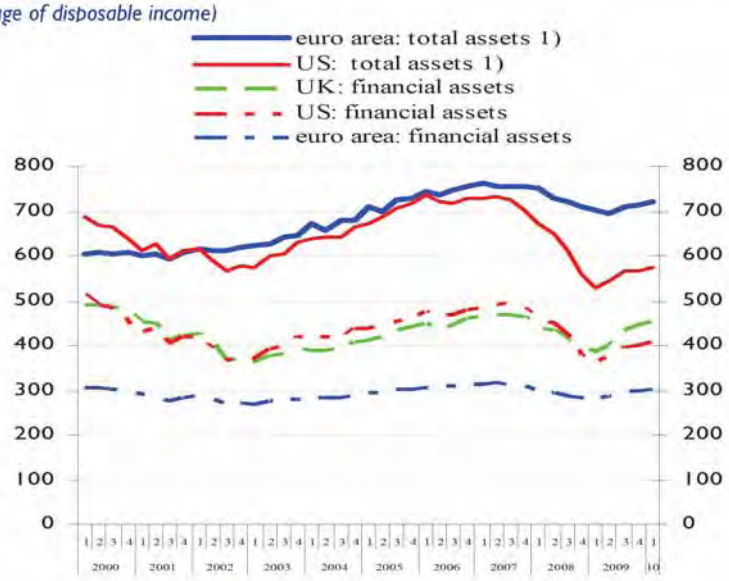
- narrower sector delimitation in US
- gross disposable income not available – must be calculated*

Sources: ECB and Eurostat (EAA), ONS, Board of Governors of the Federal Reserve System.. The ratio for the second quarter of 2010 for the euro area is an ECB estimate.
**) For the US disposable income is calculated as personal income minus personal interest payments and minus current transfer payments, plus consumption of fixed capital.*

Slide 5: Household assets: EA, US and UK

Household assets

(as a percentage of disposable income)

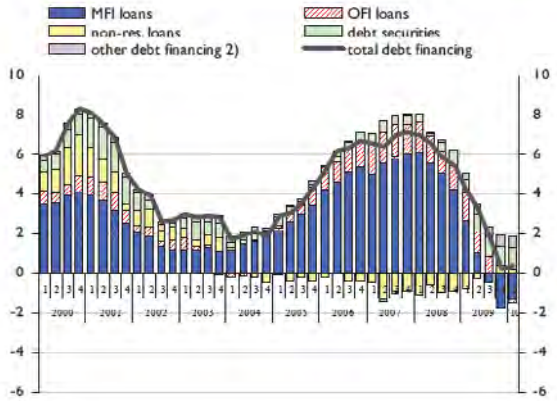


Sources: ECB and Eurostat (EAA), ONS, Board of Governors of the Federal Reserve System.
1) Financial assets and housing wealth.

Slide 6: Bank versus non-bank financing of Non-financial corporations: EA and US

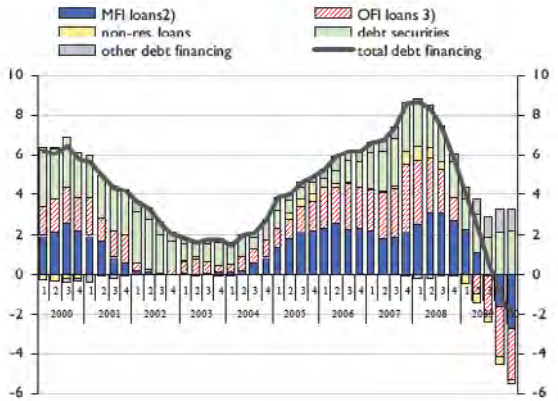
Euro area[1)]

(as a percentage of GDP, four-quarter cumulated transactions)



Sources: ECB and Eurostat (EAA)
1) Consolidated using the new counterpart sector information on loans granted by NFCs to resident NFCs.
2) Mostly loans granted by insurance corporations and pension funds and loans granted by government.

US[1)]

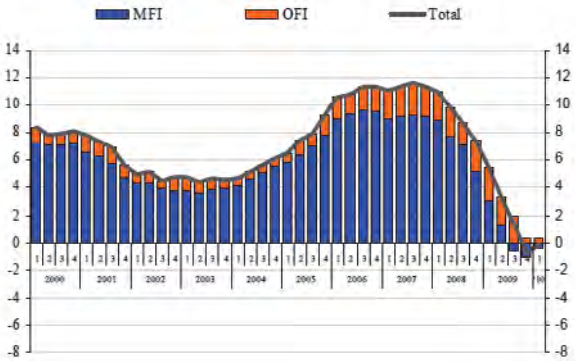


Source: Board of Governors of the Federal Reserve System.
1) US data for NFC loans is consolidated.
2) Commercial banking and savings institutions and credit unions.
3) Private and government sponsored (GSE) ABS issuers, finance companies, mutual funds brokers and dealers and funding corporations.

Slide 7. Bank versus securitised non-bank lending

Euro area loans to the private non-financial sector

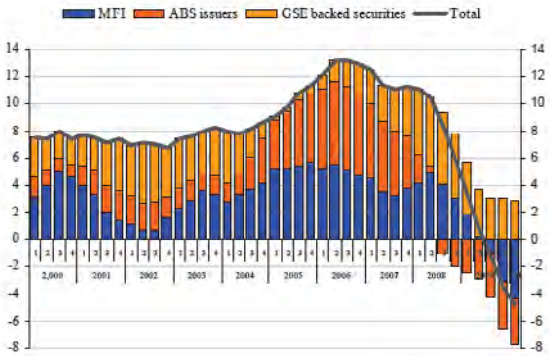
(as a percentage of GDP, four-quarter cumulated transactions)



Source: EAA (ECB and Eurostat)

US loans to the private non-financial sector

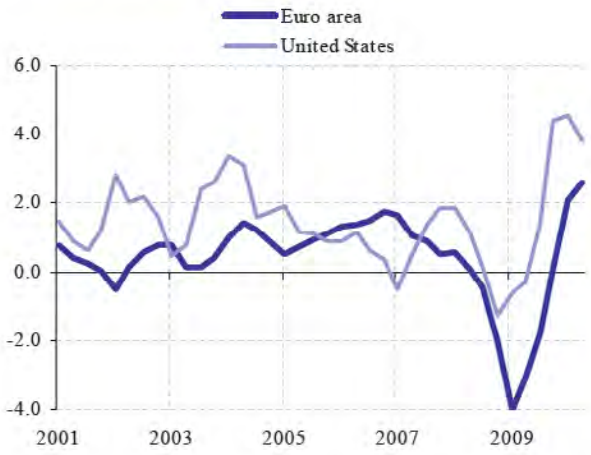
(as a percentage of GDP, four-quarter cumulated transactions)



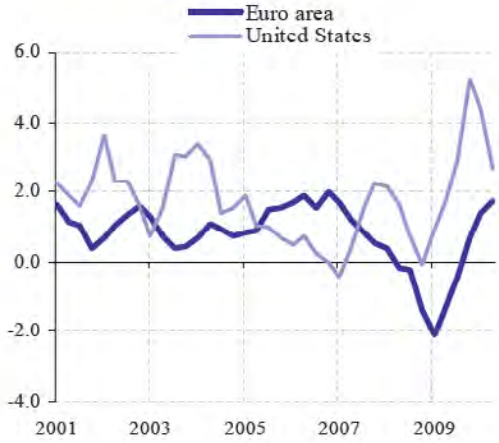
Source: Board of Governors of the Federal Reserve System.

Slide 8. Labour productivity: comparison euro area and US

Labour productivity per person employed
(annual percentage changes)



Hourly labour productivity
(annual percentage changes)

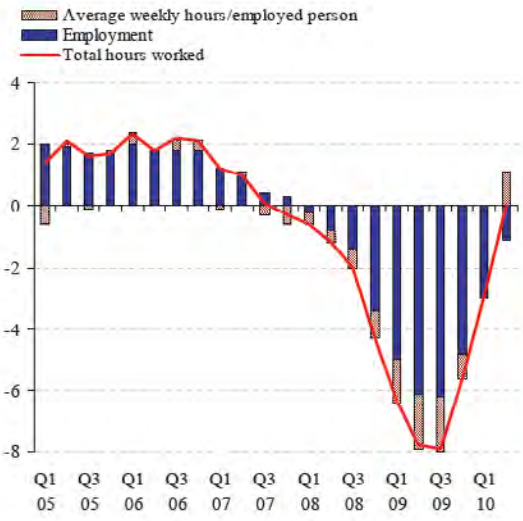


Latest observations: 2010Q2.
Sources: Eurostat, US Bureau of Labor Statistics, US Bureau of Economic Analysis and ECB calculations.

Slide 9. Hours worked in the business sector

Euro area: *(annual percentage changes)*

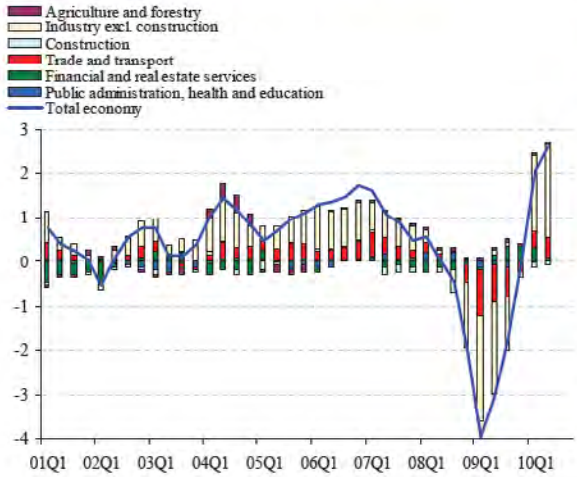
United States: *(annual percentage changes)*



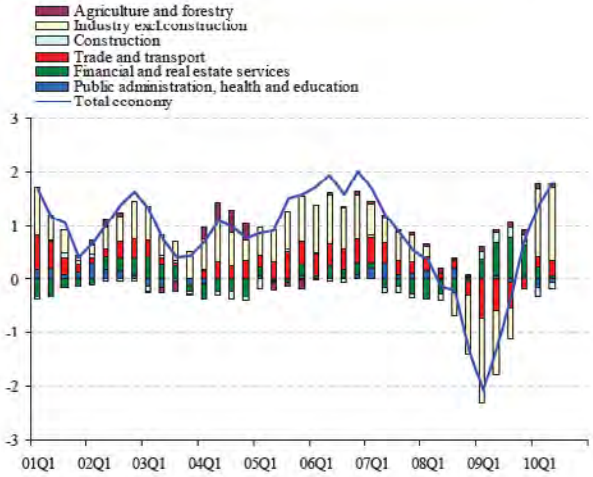
Sources: Eurostat, US Bureau of Labor Statistics and ECB calculations. Latest observations: 2010Q2.
Note: the business sector excludes non-market services (including the public sector). US employment data refer to the total number of jobs held (and thus may include a small proportion of people with more than one job).

Slide 10. Labour productivity in euro area: sectors

Labour productivity per person employed
(annual percentage changes and pp contributions)



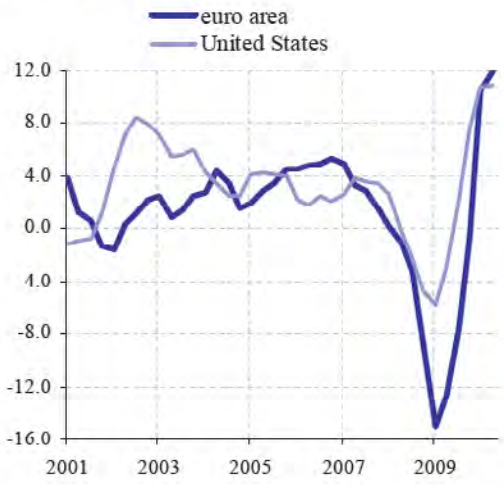
Labour productivity per hour
(annual percentage changes and pp contributions)



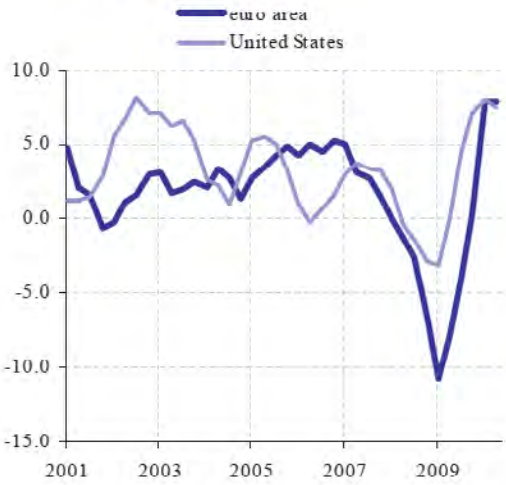
Latest observations: 2010Q2.
Sources: Eurostat and ECB calculations.

Slide 11. Labour productivity in manufacturing

Labour productivity in manufacturing per person employed
(annual percentage changes)

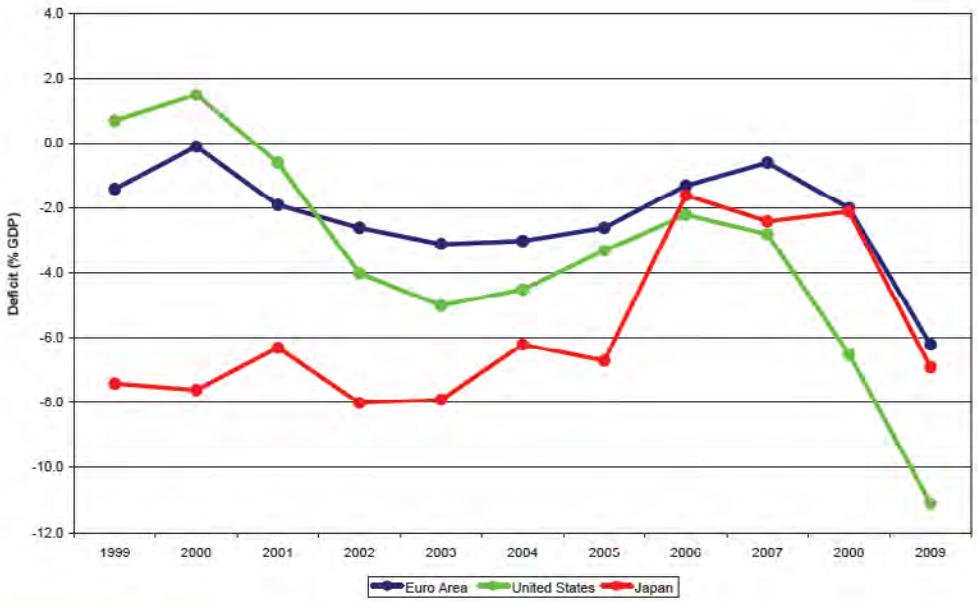


Hourly labour productivity in manufacturing
(annual percentage changes)



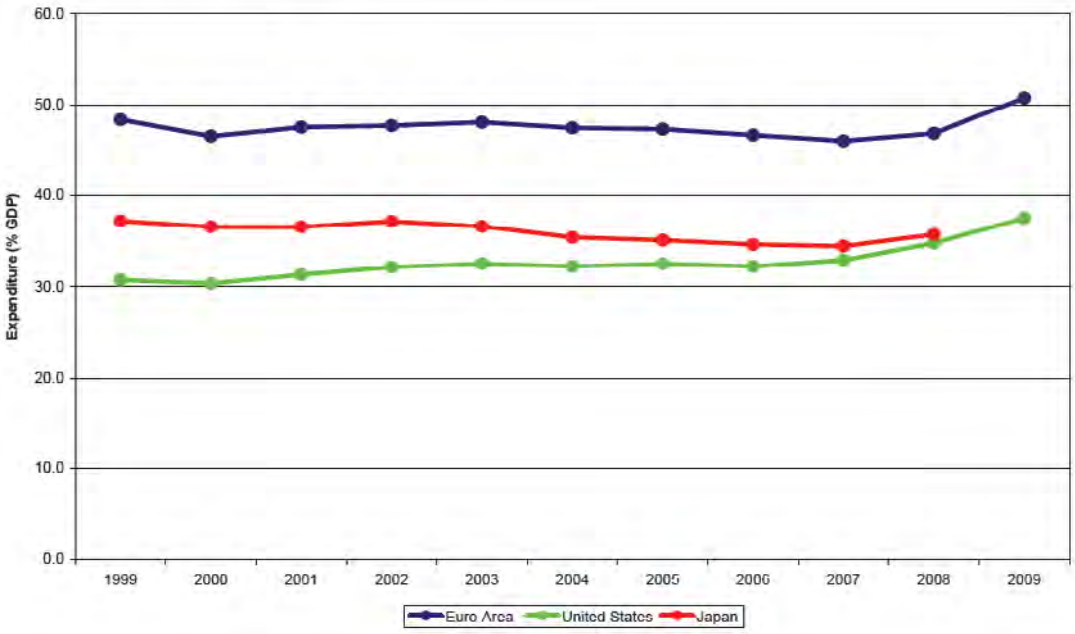
Sources: Eurostat, US Bureau of Labor Statistics, US Bureau of Economic Analysis and ECB calculations. Latest observations: 2010Q2.
Note: US data are based on jobs, euro area data are per person employed.

Slide 12. General government deficit



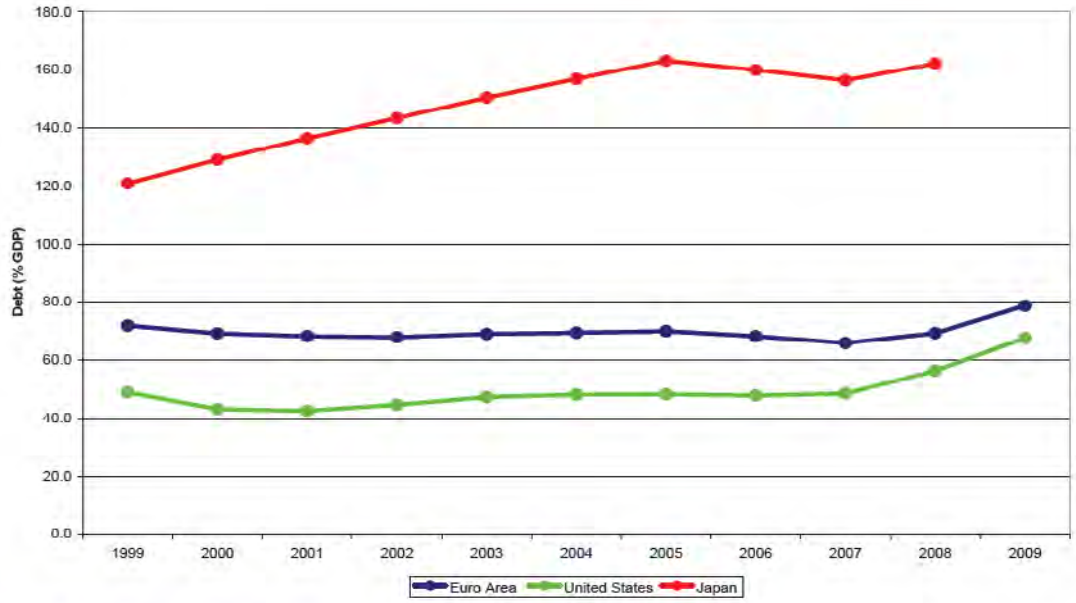
Source: ECB calculations based on national sources and Spring 2010 EC forecasts for Japan 2009.

Slide 13. General government expenditure



Source: ECB calculations based on national sources.

Slide 14. General government debt



Source: ECB calculations based on national sources.