

The quarterly accounts have switched to the 2010 base

On 15th May 2014 the national accounts changed calculation base, coinciding with the publication of the initial results for Q1 2014. The accounts have now switched to the "2010 base". Every year the annual growth estimates for the macroeconomic aggregates are updated for the past three years, to reflect new information which has become available since the previous publication. However, on 15th May 2014, all aggregate figures since 1949 were updated. Changing base means reviewing the methods, classifications and statistical sources used to compile the national accounts, in order to better reflect the economic reality.

The transition to the 2010 base thus provided an opportunity to make a certain number of conceptual changes, mostly related to the 2010 change in European accounting methods⁽¹⁾ (transition from "ESA 95" to "ESA 2010"), along with certain methodological adjustments, as is always the case when changing calculation base. These changes are outlined in the detailed explanation published in *L'Économie Française*, and available on the website insee.fr (the "2010 base" web file).

The overall methodology used to compile the quarterly accounts has not changed: the principles remain the same as those which underpinned the previous calculation base, with the exception of a few conceptual modifications.

A comparative analysis of the two bases reveals that the resulting revisions to GDP statistics and the principal aggregate indicators of demand (consumption, investment, foreign trade etc.) are relatively small when set against the variability of data series and the changes seen in previous base transitions. Broadly speaking, in terms of growth rates, the differences involved are on the same scale as the variation generally encountered in the usual annual updates. Therefore, the general picture of economic developments since the war, and particularly since the onset of the

economic crisis in 2008, remains largely unchanged. This consistency between the estimates generated by the two bases is not a foregone conclusion and, although welcome, is not immediate. Changing base is a complex statistical operation, and the results at the aggregated level are difficult to predict and control, as the changes are made at a very precise level of detail.

GDP level increased by 62 billion €

GDP now stands at 1,998 billion Euros € for 2010, an upward revision of 3.2% compared to the figures given by the 2005 base. The reclassification of research and development spending (R&D) as investment, which increases GDP by 41.5 billion €, accounts for two-thirds of this change (+61.8 billion €).

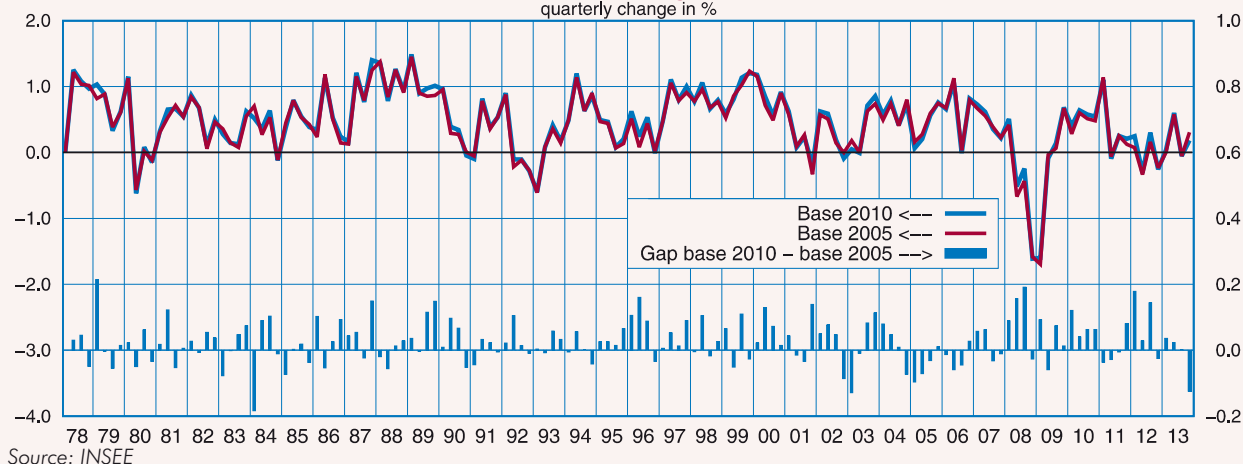
A comparison of the fluctuations in GDP growth and the various demand factors reveals that the revisions required to the 2005 base figures are relatively minor (see *Graph 1*).

For the recent past, the overall narrative remains unchanged: after five successive quarters of shrinking GDP (from Q2 2008 to Q2 2009), activity grew strongly for seven quarters (up until Q1 2011) then slowed sharply, growing by only 1.2% for the last three years (up until Q1 2014).

While the outline of these phases of recession and recovery remain unchanged, the revised overall development since 2008 paints a slightly less negative picture of the dynamism of economic activity since the onset of the crisis (see *Graph 2*). In the 2010 base, GDP had returned to its pre-crisis level by Q1 2011. In Q4 2013 GDP stood at 1.1 points above its Q1 2008 peak, while the 2005 base gave it as 0.1 points below this pre-crisis highpoint at the same date. These revisions result both from the usual revisions which take place at this time of year - involving the integration into the annual accounts of the detailed information from the structural business statistics, which only become available three years after the end of the year which they cover - and the conceptual changes which can be attributed to the evolution of the ESA framework.

(1) At European level, consistency across the various national accounting systems is ensured by the European System of Accounts (ESA), adopted by the member states of the European Union. ESA 2010 will be in application in all EU nations by September 2014.

1 - Review of changes in GDP
quarterly change in %



Source: INSEE

A strong increase in investment expenditure

The total value of investment has been substantially revised. The 2010 base counts as investment by companies and general government certain forms of expenditure which were previously considered as intermediate consumption: R&D spending or databases and capital goods with purely military applications (this latter form of investment concerns only the government).

Total investment has thus been revised upwards, by just over 63 billion€ per annum for 2010. The rate of investment by non-financial companies (NFCs) thus increases from 21.1% in Q4 using the 2005 base to 24.3% in the 2010 base. The most significant modifications concern the last few years: investment by NFCs in the 2010 base thus falls slightly in 2012 and 2013 (-0.7% between the end of 2011 and the end of 2013), while the 2005 base had this figure dropping off sharply over the same period (-4.3%); on the one hand this demonstrates the impact of R&D investment, which was more dynamic than other forms of investment during this period; on the other hand it reflects the effects of the integration of data from the definitive, semi-definitive and provisional accounts, which always takes place at this time of year. The result is that at the end of 2013 NFC investment was down 6.2 points from its pre-crisis level, while the 2005 base gave this decline at 11.5 points.

The scope of "investment by households" is modified by the introduction of a new indicator

Furthermore, the change of base provided an opportunity to incorporate new indicators of spending on housing (by households and NFCs). These indicators are estimated directly by the Observation and Statistics Department (SOeS) at the Ministry for Sustainable Development, based on statistics for housing starts and using "delivery schedules" for their completion which depend on the region and the type of housing in question, and vary in response to the current climate in the construction sector. Previously, projections for all new construction projects were made using the same aggregated, fixed delivery schedules. The new indicators are thus more consistent with the method used to calculate the annual housing figures. But they do engender a noticeable change in the contours of this sector's development over the past few years.

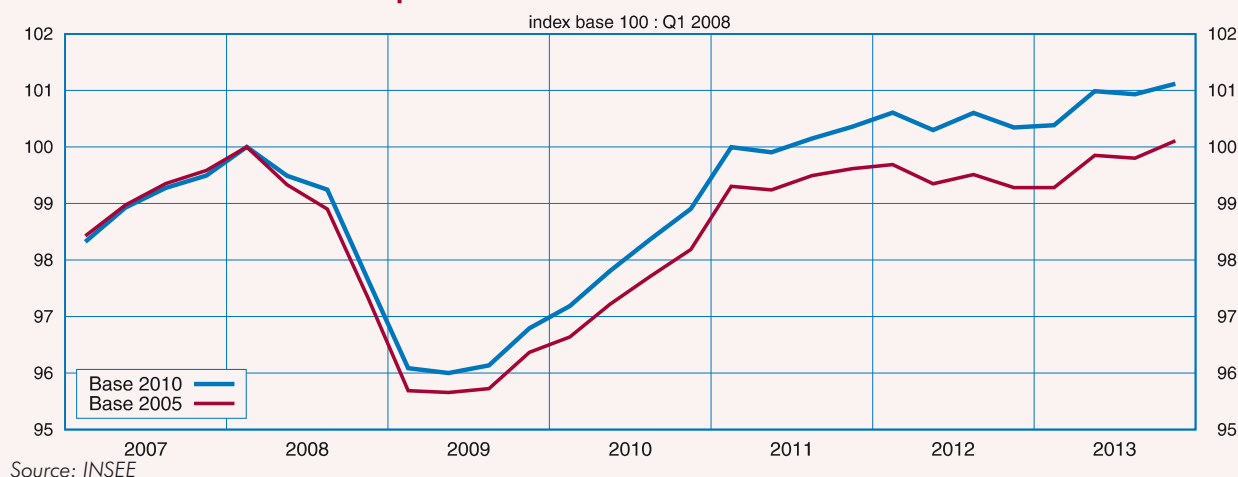
As such, in comparison to the previous estimates, investment by households (more than 80% of which is investment in construction) enjoyed a more robust rebound in early 2010 but fell back again from Q1 2011 onwards; in 2013 it fell very sharply in H2 (see Graph 3), reflecting the earlier fall in the housing start.

Several modifications affect the import and export figures

The data series for imports and exports have also been revised, with noticeable changes in quantity but only minor changes in terms of the contours of their trend. The first major revision is the integration of two significant conceptual changes. International trading (buying and reselling goods on the international market without changing them in any way) is now included in the category "goods exports", whereas it was previously classified as a commercial service. This has caused service exports to fall by 10 billion Euros for 2010, in favour of goods exports. The second modification concerns commissioned work (when a company subcontracts operations to a foreign company, providing all the intermediate resources required for the process), which in the 2005 base generated both exports and imports of goods. In the 2010 base this flow of goods is no longer recorded, with the whole operation now counted as an import of services to the country from which the order originates. This change brings a fall in the total volume of imports and exports equivalent to just below 10 billion Euros for 2010. Furthermore, revisions to the estimates of the balance of payments have led to a marked increase in the volume of exports (+34 billion € in 2010) and imports (+27 billion €) of services.

All in all, while the levels of exports and imports have changed significantly, the overarching narrative of recent years is not significantly altered. As with GDP, exports and imports bounced back more strongly after the crisis than the 2005 base figures suggested: +5.4% between Q1 2008 and Q4 2013 for exports (compared to just +2.2% in 2005 base) and +5.3% over the same period for imports (compared to +3.0% in 2005 base). Once again, these changes are a result of both conceptual changes and the customary revisions made at this time of year.

2 - Comparison of GDP between 2005 and 2010 bases

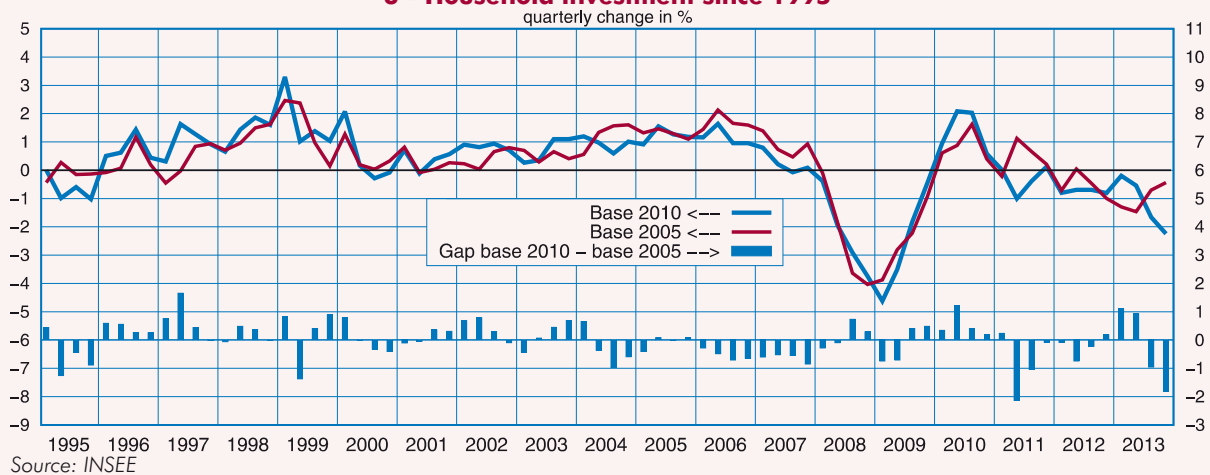


The margin rate is increased

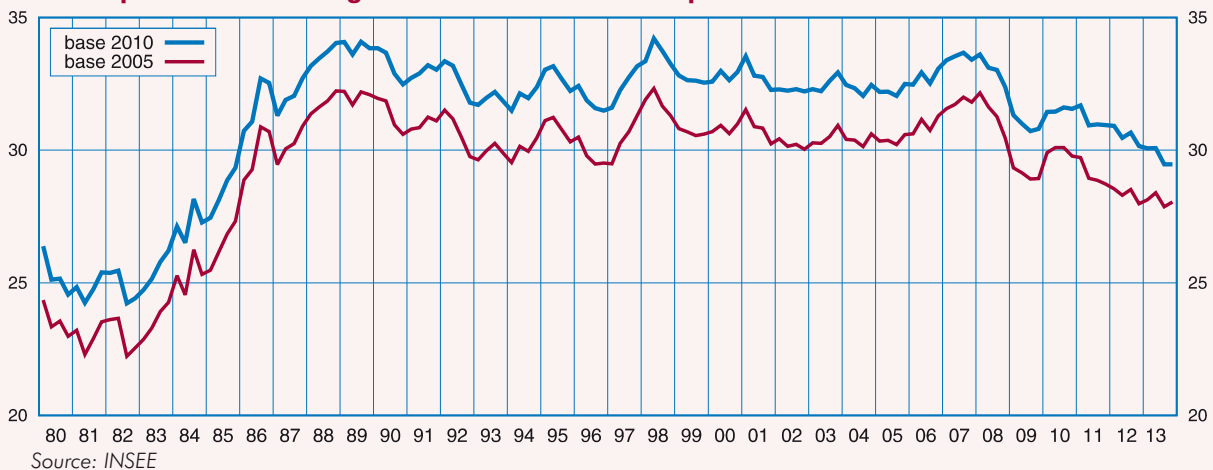
The revisions to GDP, and by extension to value added, resulting from the redefinition of R&D are largely to be found in the increased operating surplus of companies. As a result, the margin rate of French businesses is increased. The margin rate of NFCs is also increased, from 28.0% in Q4 2013 in the 2005 base to

29.5% in the 2010 base figures (see Graph 4). Once again, the effect on the proportional variation from one quarter to the next is however very limited. Finally, the self-financing ratio of NFCs shows little variation between the two bases: the greatest discrepancies result from the integration of information on the balance of property income in recent years.

3 - Household investment since 1995



4- Comparison of the margin rate of non-financial corporations between 2005 and 2010 bases



The breakdown of GDP using the demand approach is very similar in both bases

Finally, GDP can be broken down using one of several approaches (income, demand, production). For each of these approaches we can compare the 2005 and 2010 bases with regard to the relative contribution of their primary components, i.e. average level of GDP, average growth and average variance.

Our analysis using the demand approach reveals very few discrepancies between the two bases (see Tables). Most notably, the proportion attributable to business demand, via the contribution of inventory and investment expenditure, accounts for 64% of the volatility of GDP in both the 2005 and 2010 bases. Breaking down GDP using the production approach also reveals a great consistency between the results returned by both bases. ■

Breakdown of GDP using the demand approach, and contributions to its average level, development and fluctuations						
Base 2010			Quarterly changes in average		Quarterly changes in average	
	1950-1973	1974-2013	1950-1973	1974-2013	1951-1973	1974-2013
GDP			1.31	0.49	1.39	0.31
	middle weight (total = 100%)		Contributions (total = 100%)		Contributions to the variance (total = 100%)	
Changes in inventories	2	0	1	-1	35	40
Final domestic demand (excluding inventories)	97	99	100	99	57	68
<i>including</i>						
consumption expenditure of households	56	54	55	55	24	32
consumption expenditure of general government	16	22	14	26	3	0
individualized consumption of general government	9	13	9	17	2	1
collective consumption of general government	7	9	5	8	1	-1
GFCF of non-financial companies	13	12	15	12	21	24
GFCF of households	6	6	10	0	4	9
GFCF of general government	4	4	6	3	4	2
Trade balance	1	0	-1	2	8	-7
<i>including</i>						
exports	14	23	22	51	35	50
imports (-)	13	23	23	49	27	57

Base 2005			Quarterly changes in average		Quarterly changes in average	
	1950-1973	1974-2010	1950-1973	1974-2010	1951-1973	1974-2010
GDP			1.31	0.50	1.49	0.31
	middle weight (total = 100%)		Contributions (total = 100%)		Contributions to the variance (total = 100%)	
Changes in inventories	2	0	1	-1	36	42
Final domestic demand (excluding inventories)	97	100	100	100	55	65
<i>including</i>						
consumption expenditure of households	58	55	56	58	23	32
consumption expenditure of general government	16	23	14	26	3	0
individualized consumption of general government	9	14	9	18	2	1
collective consumption of general government	7	9	5	9	1	-1
GFCF of non-financial companies	12	10	14	10	21	22
GFCF of households	6	6	10	1	3	8
GFCF of general government	3	3	4	2	4	2
Trade balance	1	0	-1	0	9	-9
<i>including</i>						
exports	14	23	22	49	35	52
imports (-)	13	23	23	49	27	61

Source: INSEE