Focus on

Residential cycles in the main mature countries

December, 23rd 2008

1. Introduction

The residential sector is already in full recession in many major industrial economies (among them the US, the UK, Spain). In others (such as Italy and France) the sectoral recession is still in its infancy but prospects are by and large tilted to the downside.

Given the deepening financial crisis worldwide, the risk that recessionary conditions prevail for long in the residential sector is not negligible. However, in present exceptional conditions, any forecast is by necessity based on weak foundations.

Some useful suggestions may in any case stem from a close inspection of past residential cycles, particularly when examined over an extended time span.

To that purpose, we analysed quarterly data for eight major industrial countries (US, Canada, Japan, UK, France, Germany, Italy, and Spain) from the early Seventies to Q2 08. This sample makes up roughly 45% of the world GDP and approximately 80% of the advanced economies GDP. It is worth noting that the previous period – namely, from the end of WWII to 1970 – was an age (the reconstruction phase) of strong growth but also of limited short term instability. In this regard, the 38 year-period under investigation may be considered highly representative, at least in terms of cyclical behaviour.

2. Some main evidence

In graph 1 residential investments (see 1.a) in the above eight countries may be compared to other main macroeconomic variables such as GDP, private consumption, exports (1.a, 1.b, 1.c, respectively). At first glance, two aspects are worth noting and confirm what was largely to be expected: firstly, housing shows a wider cyclicality compared to the other variables, and, secondly, in a long term perspective overall housing development turns out to be by far more moderate compared to GDP; in other words, the residential may be considered a declining sector in relative terms.

Further and more in depth information may be gathered from graph 2 (where quarterly residential investment and GDP figures are compared at single country's level). Together with the higher volatility of residential investment, the following aspects can be emphasised:

- only in Canada and Spain (and, until 2006 in the US) residential investment has kept growing at the same pace (if not above) of GDP; as a matter of fact, these are the countries with the best performances in terms of income growth as well as the most lively demography;
- on the opposite side, Italy and Japan show the most disappointing figures over the same long term horizon. These two countries have the slowest demographic pace coupled with a rapid ageing of their population – two factors that do not favour residential expenditure;
- all in all, in the eight countries of our sample roughly 50 recessions occurred – on average 6 per country – with very limited variance among countries (from 5 to 7 each);
- on the other hand, there is wide variability as far as length of recession is concerned while the average length is about 9 quarters;
- most of the above recessions in the sample countries has been sector specific; in other words these occurred even though the whole economy remained on a positive track;
- together with very short downturns, some countries experienced – though for different reasons and in different periods – long depressionary phases (conventionally we call depression a downturn lasting five years or more); these negative phases have been both country specific and sector specific as they occurred not simultaneously in the affected countries and irrespective of the GDP dynamics. To be more precise, they may be referred to:
    - Spain, soon after the change in the political regime in the midst of the Seventies (it lasted approximately ten years);
    - Japan, as an effect of the long economic stagnation but – above all – after the burst of the real estate bubble in the Nineties (over six years);
    - Italy, as a consequence of the crisis that affected public finances and the ensuing exchange rate collapse in the early Nineties (six years);
    - Germany, as a backlash of the post re-unification efforts to upgrade and widen the residential stock at the beginning of the current decade (five years);
    - France, after the sharp turnaround in its monetary policy that pushed real interest rates significantly up at the beginning of the Eighties (roughly five years);
- on balance, residential cycles appear largely de-synchronised in a cross-country comparison. In fact, simultaneous recessions in the residential occurred in 1974-75, soon after the first "oil-shock" and in 1980-82, after the second one; finally, there has been also a long and common expansionary phase during most part of the current decade (although not in Germany and Japan);

- currently the residential is tilted to the downside almost everywhere (once again, except Japan and Germany);
- in graph 3 we have plotted long term real interest rates – together with the above residential dynamics – for those countries where such figures were available (US, Germany, UK, France). As it can be easily seen, appreciable changes in real rates have played an important role in the residential cycles, particularly between the end of the Seventies and the early Eighties when real interest rates increased by as much as ten-twelve points. Starting in the mid-Eighties interest rate conditions eased and currently they are again close to the levels prevailing before the 1979-80 tightening. The continuous reduction of interest rates (coupled with substantial financial innovation that has worked in the same direction) has certainly fed the housing boom of the last few years. Given the ongoing crisis and the efforts of governments and monetary authorities to use all available tools to face up to it in the most effective manner, changes towards tightening seem very unlikely in the foreseeable future. However, credit availability could remain subdued as an effect of the credit crunch and the need of many financial institutions to deleverage their balance sheets;
- last but not least, we evaluated the width of residential cycles, measured on the peak-to-trough distance. Within our sample of countries wider differences appear in terms of width rather than of frequency and length. Such differences are to be related mostly to structural factors. As a matter of fact, on the one hand in anglo-saxons systems the peak-to-trough may also turn out as high as 40% or even surpass such threshold; on the other hand, in continental European countries the housing sector is by far more stable, with Italy as a front-runner in this particular ranking[1]. The above outcomes are on balance fully consistent with the well-known high flexibility of anglo-saxon economies that are able to react and adapt themselves to a changing environment much more rapidly than countries in continental Europe. On the other hand, in the latter group the housing stock is on average quite old. This in turn requires a higher share of maintenance outlays devoted to total residential investment, which is basically more regular over time and thus tends to smooth the sectoral business cycle.

3. Concluding remarks and prospects

What are the main conclusions from the above evidence? And, above all, what do past recessionary episodes suggest to assess the likely length and width of the ongoing one?

As for the first question, it emerges that: a) residential cycles are scarcely synchronised among the major countries; b) the paces of growth are not homogenous; c) relationships with the overall macroeconomic cycles are fairly

[1] In any case, such figures should be treated with caution. In Germany even the statistical setting has been modified as an effect of the eastern part re-unification, while in the Italian case the huge size of the black-economy may have contributed to smooth cyclical swings.

weak. Two different "models" stand out: an anglo-saxon one characterised by high growth/high cyclical instability; and a continental Europe model where low growth and lower cyclical swings are the dominant features. Japan and Spain however do not fit either model. In the former country current activity levels are similar to the ones prevailing in 1970, which has implied a reduction of roughly 50% compared to the peak reached in 1990 before the crisis broke out. In the latter country activity levels have more than tripled since 1985, showing a record growth pace (over 5% p.a.) among the sample countries.

As for the second question – i.e. suggestions to assess future prospects – there are two alternatives views. One is to deem that the current recession – even allowing for differences among countries – is largely in line with past crises. Under such hypothesis the ongoing recession is not different in its very nature from past episodes. As far as the Group's mature countries are concerned, one could hence draw the following conclusions:

a) in the US the downturn should be close to its trough;

b) in Italy and France the recession, which has just started, should not surpass a 10-15% contraction from previous peaks;

c) in Spain, also given the huge over-building of the last few years, the decline in size could be even double the French-Italian case.

Unfortunately, this relative benign view is not the most likely. As a matter of fact, a number of exceptional factors are at play that worsen and make final outcomes much more uncertain. Just to mention the most worrisome ones, these are:

- in the last few years there has been a tremendous boost to housing almost everywhere, thanks to a combination of very low interest rates and aggressive financial innovation that have enormously widened the pool of borrowers; in some cases (for example, France) governments also added substantial fiscal incentives; as a consequence, housing prices signal a fundamental supply/demand mismatch that needs to be corrected also through a strong contraction of future construction activity;

- monetary policy now and in the foreseeable future can do very little as policy rates are already at record lows and credit standards are set to be furtherly tightened;

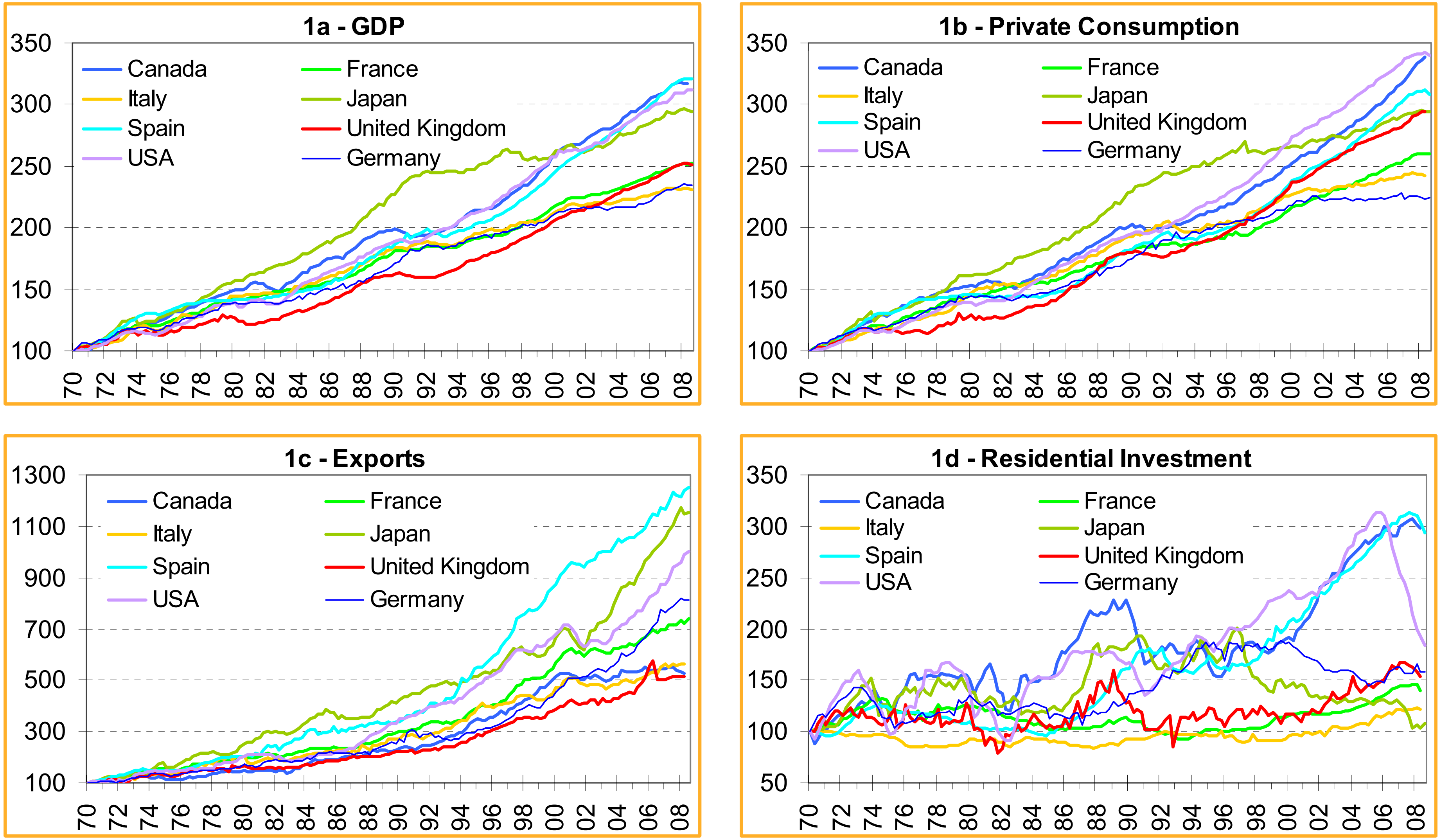
- finally, it is worth recalling that most recessions of the residential sector have been of an endogeneous nature; however, adverse macroeconomic conditions have taken their toll thus contributing to deepen and extend sectoral downturns. In present circumstances, we are probably close to a reversal of the cause-effect relationship between housing and the wider economy: at the beginning (think of the US, UK or Spain) it was the real estate burst to trigger the downturn of the whole economy; now, worsening macroeconomic conditions are causing a deep feedback on residential construction and threaten to affect it for long through declining disposable income, growing unemployment and rising uncertainty on global future prospects.

Considering all the above, we are thus moving into a new scenario where past behaviours can offer only limited help in assessing future prospects.

Finally, we also note that residential sector's crises unfolding within a strongly deteriorating macroeconomic context were on balance fairly limited in their length. In addition, it appears also reasonable to expect that country-specific factors will keep playing a key role even at a time of global recession, which in practice could mean that residential downturns in France and Italy are not set to reach the depth of the US one.

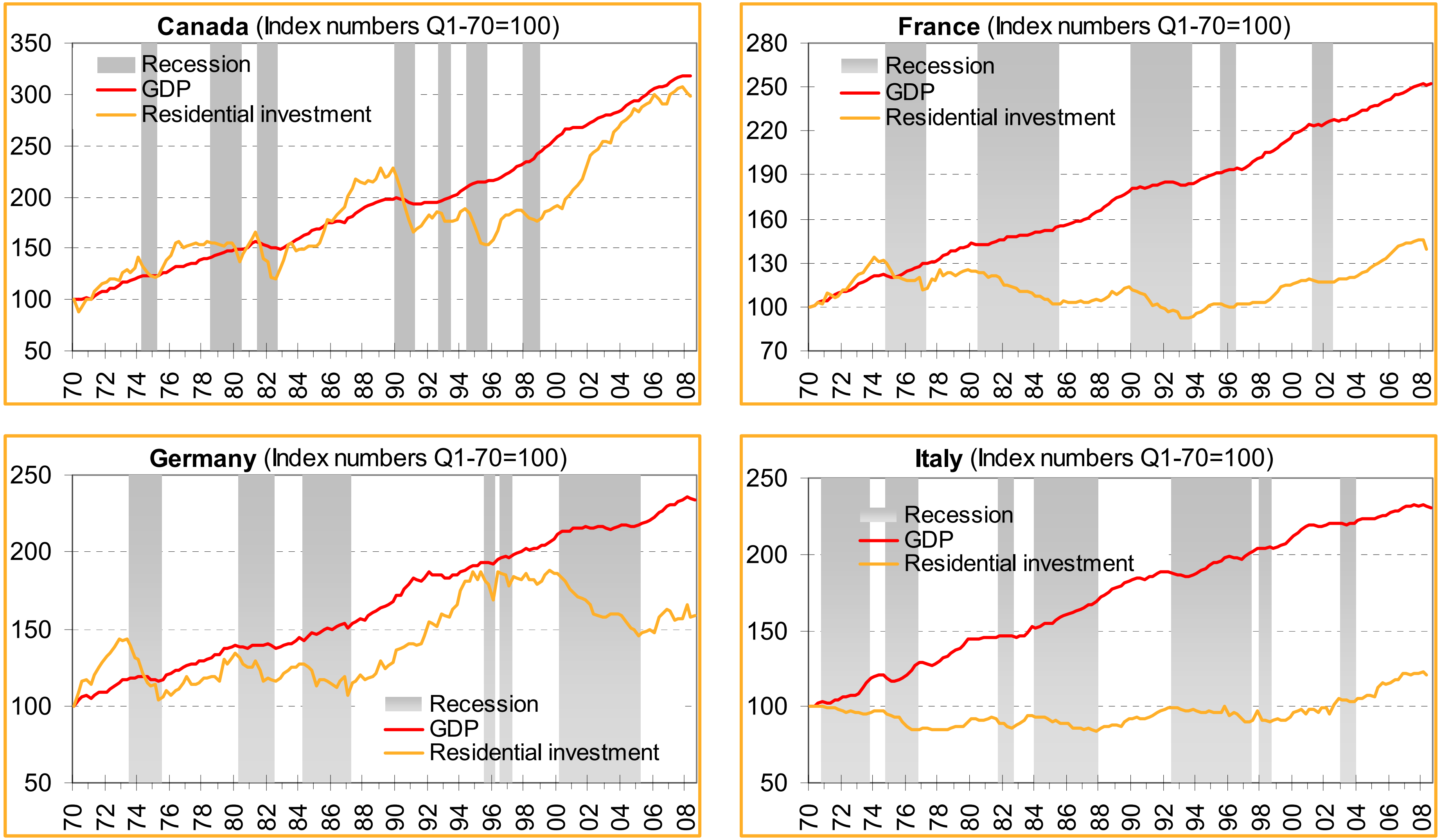
However, the above remarks may hold until we remain within the hypothesis of a contraction of world output and trade comparable to past recessionary phases, though admittedly the actual one is more severe and globally extended. A different case would be if the ongoing downturn translates into a full-blown depression (as in the case of output declines on both Atlantic sides in the range of 2-3% p.a. lasting at least a couple of years and coupled with sensible declines in the price levels). In this event consequences on the residential segment would become unpredictable although clearly more serious and enduring.

Graph 1 – Long term dynamics of some of the major macroeconomic variables



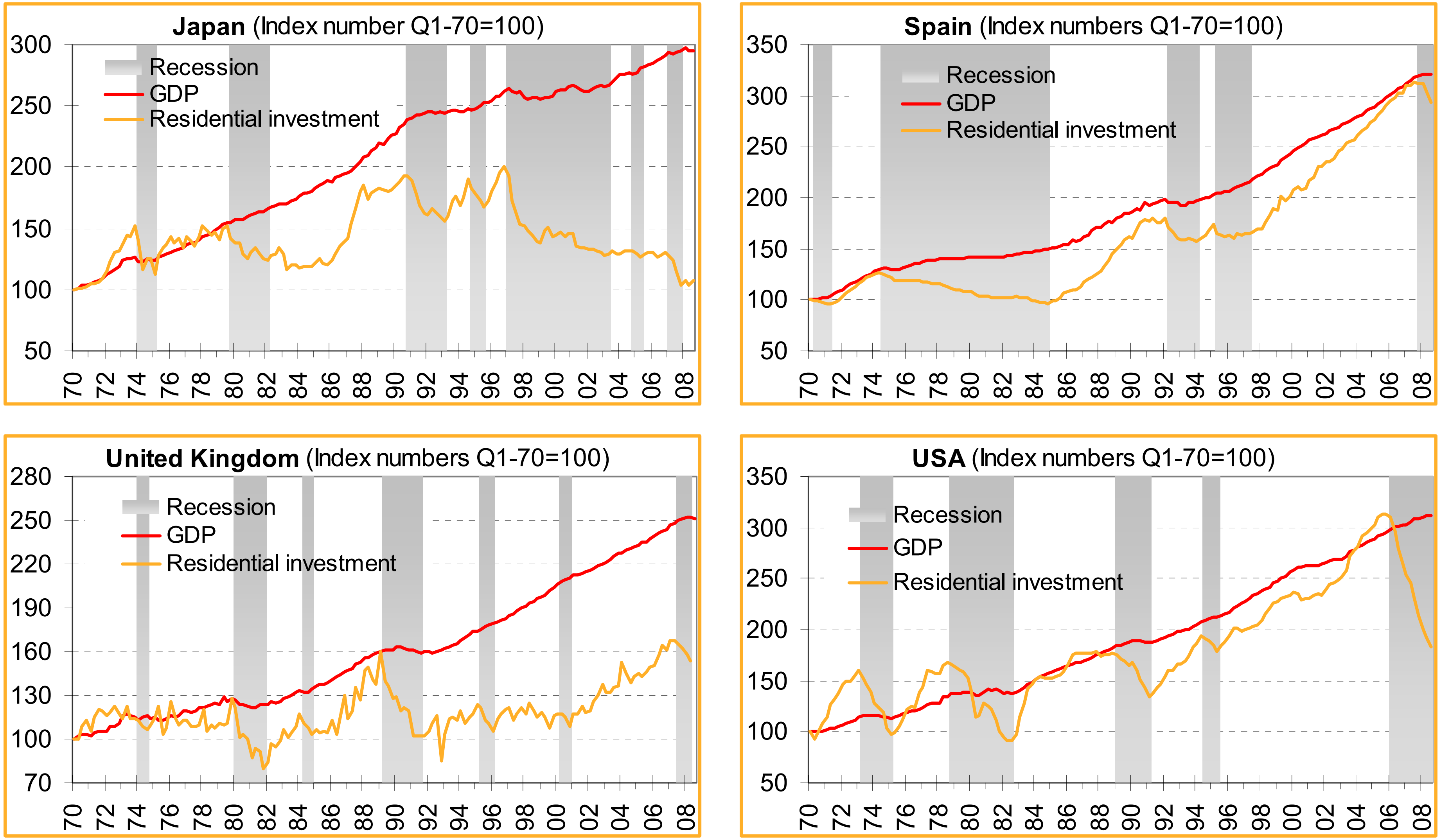
Sources: OECD, National Statistics Institute; quarterly data, index numbers Q1-70=100

Graph 2 – Residential investment and GDP business cycles



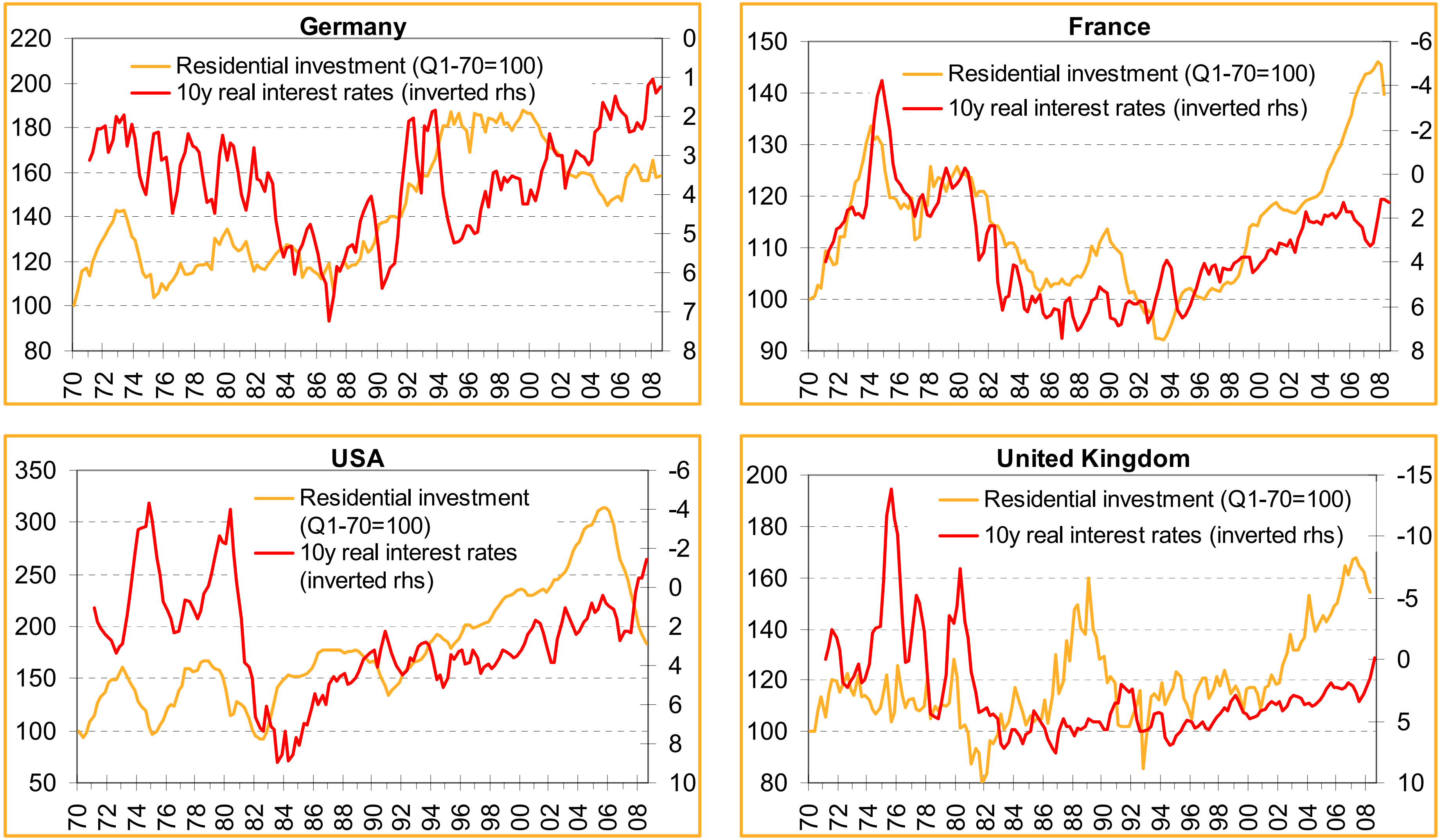
Sources: OECD, National Statistics Institute; quarterly data

Graph 2 (continued) – Residential investment and GDP business cycles



Sources: OECD, National Statistics Institute; quarterly data

Graph 3 – Residential investment and real interest rates



Sources: OECD, National Statistics Institute; quarterly data