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ECONOMICS | RESEARCH

How things have changed…

Financial market economists as users of economic statistics

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Abstract

We consider, from a financial market economist's perspective, how the use of statistics has evolved over the recent past. The emphasis on a coherent and persuasive narrative underpinned by a broader range of statistics, at the expense of a narrower focus on signal extraction for key macro variables, means that the demand is for more comprehensive data that are comparable across sectors, economies and over time. The implications for the data providers are that the priorities should be production and presentation of more complex data, rather than an ever increasing amount of high-frequency indicators.

"Anyone who cannot speak clearly and simply should say nothing and continue to work until he can do so."

Sir Karl Popper (1994)

"Most questions of public policy relate to uncertainties. Answers depend upon an ability to understand and evaluate those uncertainties. Yet many commentators and members of the public want to believe in certainties. They want to cut through the thickets of caveats and technical difficulties to the 'bottom line'."

Mervyn King (2010)

Col. Jessep: "You want answers?"

Lt. Kaffee: "I want the truth!"

Col. Jessep: "You can't handle the truth!"

***A Few Good Men* (1992)**

1 Introduction

It is not often that financial market economists are asked to be philosophical[1]. But the questions of what service we provide and what value we add are particularly pertinent in an environment where resources are tight. Statistics – facts – fortunately play an important role, but as we will argue in this paper, financial market economists' use of the data has changed substantially as the nature of our role has evolved.

In this paper, we will discuss the changing role of financial market economists in the years since the onset of the financial and sovereign crisis, where the much-touted "Great Moderation" became a matter of historical study. From that, we will outline how our use of statistics has changed in light of that, and set out where improvements in the provision of statistics have helped us, and where we think there is still some distance to go. Our perspective is firmly non-academic, and really reflects our perceptions: we will surely have missed some important progress made in the last few years, and may well have missed major programmes currently in place. Whether that reflects our negligence, a need for better communications effort, or both, we leave to the readers to decide.

2 What financial sector economists did before the crisis

To fix ideas, we offer a highly stylised, partial and unfair characterisation of the framework applied by financial sector economists before and after the financial crisis. As a side remark, we note that much of this characterisation would have applied to the economics community more generally and, to some extent, to the academic world.

In our stylised pre-crisis world, the financial sector economist viewed the economy in terms of three essential relationships and two policy response functions: the economic relationships govern the demand for goods (an IS curve), supply (potential output), and provide a link from real to nominal outcomes (a Phillips curve). The monetary and fiscal policy response functions complete that conceptual framework, tying down the policy stance. That is sufficient to generate a set of economic outcomes and, in principle, also explain and predict asset prices.

Assume, for a moment, that the broad structure is "known" – or at least that this view of the structure is widely shared – but the parameters of the structure and the data are not. In that context, the financial sector economist's job is to produce estimates of both, by providing useful forecasts of current and future data, and subsequently to draw conclusions of the likely policy (re)action. She hands those estimates over to her clients, who can draw on a number of economists with broadly comparable views, in reaching their own judgment.

Here everyone has roughly the same "canonical model" of how the economy operates, although differences of view will arise: that provides scope for the financial sector economist to market her "non-consensus views" – they are likely to be based on relatively small differences in interpretation of the data or the underlying policy reaction functions, not a fundamentally different interpretation of the economy. As a result, the nature and the extent of uncertainty are limited. Consequently, communication – whether for the policymaker or the financial market economist – is relatively straightforward, because the "storytelling" that is employed is similar. It would run along lines such as these: "the economy was hit by a (say) positive demand shock that led to less spare capacity. In order to control inflation, interest rates will go up, and fiscal policy is likely to be tightened".

What is the role of statistics for market economists in this environment? Statistics in this artificial construct are mostly about extracting a signal about the key data – "now casting" or very short-term forecasting of GDP and inflation, rather than understanding or explaining the consequences of those data. The priority is on reliable and timely headline measures, with much less emphasis on cross-country, cross-sectional or longer-term perspectives.

[1] Throughout this essay, we will be taking the view of a financial market macroeconomist, as opposed to the much wider category of financial market analysts or participants. This obviously affects our perspective – which is distinctly macroeconomic – but we believe that the points we make are applicable more widely.

3 What the financial market economist does now

That approach suits a stable environment where economic outcomes and policy are relatively straightforward to predict. The crisis has made clear that the world is anything but that, and the job of financial markets has become commensurately more challenging and exciting. But on reflection it is clear that even in the old world, the approach was insufficient, even if back then we could afford to be "lazy". The reality check provided by the crisis has certainly led to a re-assessment of economic paradigm, and hence on what we as financial market economists should focus. Financial market economists have responded by changing their approach in a number of ways. Some examples:

- The data are more "imprecise" statistically and conceptually than most were willing to acknowledge. There is significant academic literature dealing with data uncertainty, and the insights from that work are substantially reflected in policy making. That is increasingly being recognised in financial market economic analysis, both in terms of the economic assessment and in making policy predictions. But it is fair to say the point is underappreciated by market participants more widely.
- The much bigger issue of conceptual or model uncertainty is subject to increasingly sophisticated academic analysis. But the impact of this work remains, in our view, relatively limited in terms of policy making and that way of thinking is not really embraced for financial market economists. The intellectual and the communication challenges that this work presents for the financial market economist are substantial, and the typical approach is to stick firmly to one paradigm: a clear, consistent story with a "bottom line" is paramount in communicating with clients. Clients are then choosing between different economists' paradigms, rather than, more narrowly, their interpretation of the most recent data.
- Reflecting a much more complex economic reality, the policy responses that are relevant for a financial market economist are multidimensional: as an example, it is no longer sufficient to make a call on where the ECB will take interest rates next because the ECB is changing its policies more widely, with a significant impact on the size and shape of the balance sheet. In the fiscal policy space, the strategy the UK government is adopting in reducing the deficit is more important than the precise tax and spending measures. In general, the focus is more on strategy – which approach the policymaker is taking over the longer term – rather than the immediate policy decision.

These factors make the job of a financial market economist much more challenging. The economist's natural inclination is to stress uncertainty – but as the quotes at the beginning of this paper suggest, the demand is for certainty, or at least clarity. Even if the 'truth' is unknowable, 'answers' are required. What's the best solution?

In our experience, successful market economists have responded by providing a broader narrative. A strong demand for providing a narrowly defined take on the immediate outlook for growth or inflation still remains. But contextualising – by providing comparisons across time, across sector and country, and by relating to different strains of thinking – is much more valued that it was before the crisis. The strength, coherence and plausibility of the narrative, and in particular the factual, statistical underpinning, have assumed greater importance.

4 So how does this matter for the use of statistics?

The most basic function of financial market economists remains that of acting as a data filter on the 'traditional' set of economic statistics, sifting out the noise from the signal, and determining how the latest information refines any given view of GDP growth, inflation, unemployment and other headline statistics. But that in itself is now only one element of the whole: with the changes in the economic environment, the financial market economist has become more demanding, and if data producers want their output to remain relevant to the consumers of their output, then the provision of statistics must necessarily evolve accordingly.

We are of course acutely aware that ours is a partial view and that these issues have been the subject of extensive discussion and that very substantial progress is being made – indeed the Fifth ECB Conference on Statistics in 2010 covered the issue extensively (see ECB 2011). What we discuss here is what the priorities should be, from our perspective. Broadly speaking, one area relates to improvement in the accessibility and presentation of the data, while the second area relates to coverage. In a world of

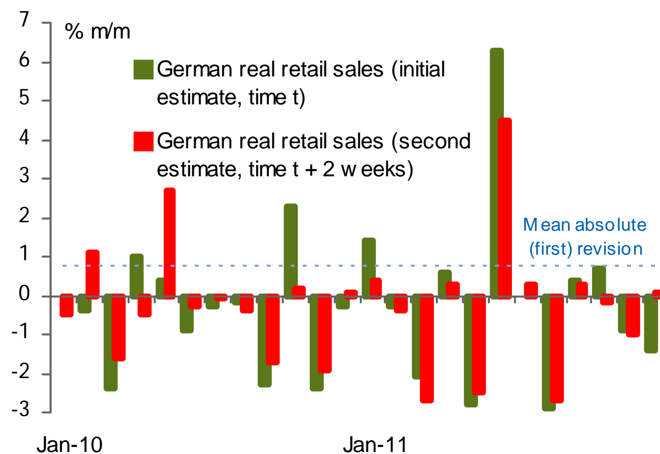
unconstrained resources, such demands could be accommodated easily enough; but in a world of scarcity, that may necessitate a reallocation of priorities.

4.1 Less of the same, but better

The timeliness, accuracy and coherence of the data we know and love can always be improved. As mentioned, a lot of progress has already been made in the area of data uncertainty and in core statistical concepts. From a financial market economist's perspective, her job can only be made easier if the providers of statistics continue to provide 'more of the same' while striving – as ever – to raise the overall quality of the statistics being produced. Who would not want more timely GDP estimates that are less prone to revisions?

But, in light of the pressure on resources and the changing priorities, there are arguments for reconsidering whether the current trade-off between timeliness and accuracy of statistics is optimal. We venture that there would be few complaints from financial market economists if, in certain specific cases, data were less timely but were more accurate as a result. To select but one example, Chart 1 suggests that German retail sales are prone to frequent and significant revisions within a fortnight of the first estimates having been published, so the actual information content in the first release is probably quite low. And in such cases, not publishing the statistics at the earliest opportunity may plausibly free up resources – not just for the producers of the data but also for the distractable consumers, including the financial market economist.

Chart 1: German real retail sales estimates



Source: Bloomberg, Haver, RBC Capital Markets

4.2 Easier access and better presentation: let the data speak

The time thus freed up by reappraising priorities and re-allocating resources might be used sensibly to improve the life of the users further by enhancing presentation and accessibility of the statistics. This is not to suggest that data users ought to be spoon-fed, but it is incumbent upon data providers to make their output readily available and understandable, at the very least to an informed and interested audience.

This, of course, is an area where the combination of technology and a change in philosophy has transformed the landscape. The huge increase in data availability and the increased capacity to display data dynamically and interactively has led to a revolution in the way information can be conveyed. This is not our field of endeavour, so we cannot give an account of the evolution of thought and practice there – but in the academic/intellectual field, the likes of Edward Tufte and Hans Rosling[2] have provided inspiration for displaying complex and rich data sets in innovative ways. The official sector also provides good examples of this new practice – e.g., with the IMF/World Bank interactive data mapping tools, and similar initiatives from a number of other agencies[3]. And outside the official sector, public data are also being made available

[2] See http://www.edwardtufte.com/tufte/ and http://www.gapminder.org/ for relevant home pages.

[3] The IMF Data Mapper can be found here: http://www.imf.org/external/datamapper/index.php.

in more accessible, interactive formats[4]. In the field of economics and finance, the press has been making significant advances in displaying complex data – think of the numerous interactive displays of the BIS data of bank holdings of debt, which has become a key tool for understanding interdependencies between the financial and sovereign sector. The ECB interactive and dynamic yield curve tool is another example of making complex, multidimensional data available in a user-friendly format[5].

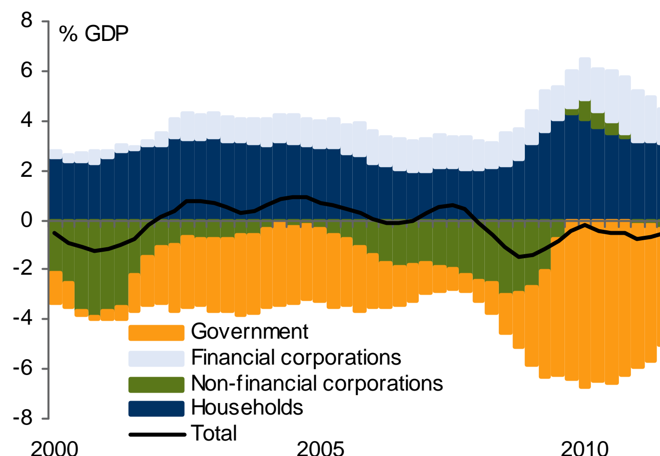
We would argue that the statistical authorities are generally somewhat lacking in this field, even if progress is being made. Sure, there is a strong argument for distinguishing between data assimilation/provision and presentation. On that argument, part of the job of the market economist (or the policymaker or the journalist for that matter) is to make sense of the statistics, while it is the job of the statistician to provide the high quality data in a timely manner. But we are of the view that the increasing complexity of the data means that the statistics providers themselves should provide not just better access but also better presentation of the data. Not only would that make our job easier, it might even improve our analysis.

4.3 Better coverage and comparability

But the more mundane topic of partial (or sometimes complete) absence of relevant and timely statistics remains an issue. This is obviously a huge international challenge, particularly in areas where resources and technical capacity constrain statistical providers. Globally, there are gaps in the existing data and, as will be discussed at this conference, the crisis has led to the identification of whole new areas where statistical gaps exist. We are well aware of the strides that are being made in this area at the European level and internationally – e.g., through the IMF's programme on Financial Soundness Indicators – dating back at the very least to the Asian financial crisis in the late 1990s. But there are strong arguments for attaching higher priority to this, and for improving communication.

European statistical provision is comparatively well-advanced, but even here there are gaps in what we consider basic macroeconomic statistics that need filling. One example is the lack of comparable and comprehensive data on the income side of the national accounts. Chart 2 shows euro area sectoral balances – the savings-investment imbalance of the key sectors in the economy – at the euro area level as a whole. It is important in telling the story about how the different sectors are responding to crisis conditions: the fiscal expansion is visible, as is the retrenchment by the private sector. These data are clearly important in forming a view on the outlook for the euro area economy and the likely policy response.

Chart 2: Sectoral balances - euro area



Note: Contributions of sectors to the net lending (+) / net borrowing (-) of the euro area (as a percentage of gross domestic product, based on four-quarter-cumulated sums).
Source: Eurostat

[4] The Public Data Explorer by Google is one such prominent facility, where a wide range of public data are now available. See http://www.google.com/publicdata/directory

[5] The ECB's yield curve tool can be found here: http://www.ecb.int/stats/money/yc/html/index.en.html.

But those data are surely even more relevant when looking at individual economies across the euro area. The lack of up-to-date and harmonised information across euro area economies has long been problematic to those seeking to undertake serious economic analysis; but in a rebalancing environment where deleveraging of the private sector across swathes of the euro area is an important theme, then the absence of comparable and comprehensive statistics presents a significant challenge. We are not party, of course, to the discussions that statisticians have about how to make progress in these areas, nor do we know what plans are in train for addressing them. But when we are unable to compare even the most basic of balance sheet information across economies in a timely fashion, our analysis surely suffers.

Other such examples include the ECB balance sheet – admittedly, understanding a central bank balance sheet is a complicated task at the best of times, and the structure of the European System of Central Banks of course makes this challenge bigger. But it remains a matter of some concern that – at a point where the Eurosystem's balance sheet is expanding significantly – it remains such a tricky task to assess the individual euro area central banks' balance sheets on a comparable basis.

5 Conclusion

In summary, life for the financial market economist has become more challenging and exciting, as the analytical requirements have moved away from a narrow interpretation of the data in the context of a canonical economic model towards a broader-based, more thematic analysis of economic developments. With that comes changing statistical requirements and interests – we continue to work the indicators hard to extract as much signal as possible about the outlook for activity and inflation, but the demand is for a more complex storytelling that draws on a wider range of information. Obtaining, manipulating, presenting – and of course understanding – more complex data is key.

In terms of the provision and presentation of statistics, there has been significant progress. But in our view, there is a strong case for moving the emphasis away from the provision of high-frequency updates of macroeconomic variables, and instead moving towards a broader provision of data, comparable across country, sector and across time. Better access and presentation surely also should be a higher priority. These views will doubtless not come as a surprise to statistical producers – but we hope that the emphasis from the "applied" end of the data-user spectrum will help these developments along.

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