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Editorial

The large US current account deficit has in the recent past dominated both the news and much of the research conducted in the field of international macroeconomics. Although many agree that the deficit presents a challenge different to the external imbalances and indebtedness of Latin America back in the 1980s, a number of policymakers and economists nevertheless regard it as too large. They are particularly worried about the effects of large external deficits on foreign exchange rates, although it is widely acknowledged that the depth of internationally integrated financial markets makes it possible for an individual country to run consistently large current account deficits without risking the stability of its foreign exchange rates.

Those who want to express their concern about current trends continuing speak in terms of 'global imbalances', 'instability' and 'fragility'. Recent research has emphasized the importance of the integratedness of global commodity markets, not financial markets, to the exchange rate effects of current account

deficits. This is interesting and important, as the commodity markets are much less globally integrated than the financial markets. The implication here is that the speed of price adjustment is slower in the commodity markets than the financial markets. This difference in the speed of adjustment can potentially be an important risk factor: if international financial markets allow for large differences between income and expenditure in individual countries, they also create a threat of large incipient exchange rate movements, which, in turn, have the potential to generate large, even panic-like movements in international capital flows.

Many people think these threats alone provide sufficient justification for public sector intervention to reduce the US current account deficit. Economists are currently involved in a lively debate over the need for such intervention and also over the appropriate monetary and fiscal policy measures and their relative efficiencies.

Jouko Vilmunen

Macroeconomics of large open economies: current account dynamics and policy coordination

To caricature, we could argue that there are two views on how to deal with the growth of the US current account deficit where the difference between the two depends, basically, on the desirability of public sector intervention to reduce the growth. The first view argues that as long as the US current account deficit is the outcome of optimized

saving and investment behaviour by private agents with rational expectations under competitive market conditions free of frictions, there is no justification for public sector intervention. This is actually a restatement of the first welfare theorem according to which a decentralized general competitive market equilibrium maximizes social welfare. According to the alternative 'prudential' view, even if deficits reflect optimized saving and investment decisions by private agents, distortions are present that

have led to US current account deficits that are too large. Consequently, public sector intervention to reduce the deficit is desirable. The precise distortions and whether these do indeed justify policy measures aimed at reducing the deficit have unfortunately not always been worked out. However, the theoretical justification for public sector intervention as well as the design of optimal policy critically depends on the existence and precise nature of these distortions.

It appears, then, that a sensible approach to analysis of the US current account deficit starts from the assumption that the deficit reflects optimal saving and investment decisions by private agents, ie households and firms. If we further assume that agents have rational expectations, a natural way to proceed is to ask whether the US current account deficit is sustainable and which properties of the private agents' saving and investment decisions are critical from the point of view of sustainability. In his forthcoming Bank of Finland discussion paper 'Adjustment of the US current account deficit' Mika Kortelainen raises these questions with the aim of trying to provide some answers through a quantitative simulation exercise.

To study current account dynamics Kortelainen constructs a dynamic general equilibrium macromodel of two large open economies and estimates the model by Bayesian estimation techniques using quarterly US and euro area time series observations over the period from the first quarter of 1977 to the last quarter of 2004. The model constructed by Kortelainen is actually an extension to an open economy context of the dynamic general equilibrium macromodel for the euro area developed in the Bank of Finland. In accordance with the logic of constructing dynamic general equilibrium macromodels, the behaviour of households and firms in Kortelainen's model is based on intertemporal optimization. Price and wage rigidities in turn give the model a New Keynesian flavour. Since wealth dynamics in dynamic general equilibrium

models play such a critical role, these models provide almost ideal tools to analyse issues related to current account dynamics.

Notwithstanding the above, it is a well known fact that it is usually very difficult to find an empirically satisfactory parameterization of these models, ie without extra effort and creative thinking the empirical fit of the models tends to be fairly poor and leaves a lot of room for improvements. Kortelainen matches his model to the data by first calibrating some of the model's parameters, after which he estimates the stochastic properties of the disturbances as well as the parameters of the policy rules and adjustment costs functions using Bayesian estimation techniques. He concludes the empirical evaluation of this calibration and estimation exercise by comparing the moments of the distributions of some of the model's key endogenous macrovariables to their empirical counterparts. This evaluation process seems to suggest that the model's weakest point is the relatively poor correspondence between the theoretical and empirical cross correlations.

Kortelainen uses the model to run a set of interesting dynamic simulations. Assuming that half of the US current account deficit is not sustainable, he considers four alternative scenarios to restore sustainability: an increase in the saving rate of US households, an increase in the US dollar risk premium, a coordinated US fiscal tightening and an uncoordinated US fiscal tightening. According to the simulation results, an increase in the saving rate of US households, implemented through an increase in the household sector discount factor, and an increase in the dollar risk premium both represent an effective means to restore the sustainability of the deficit.

This result is intuitive, as in both cases US households will choose to postpone consumption. Due to opposite interest rate effects, however, investments in the US will grow in the former and fall in the latter case.

However, the simulation results also suggest that these two scenarios are not innocuous: the risk of deflation in the US or in the rest of the world will, in the first case, take the US economy, and, in the latter case, the rest of the world into a zero interest rate trap.

If, on the other hand, fiscal policy measures are employed in an attempt to reduce the deficit, countries will, on Kortelainen's results, avoid hitting the zero interest rate floor. However, fiscal policy proves insufficient to restore the sustainability of the deficit. On the other hand, through coordinated fiscal tightening in the US, whereby fiscal policy is tightened in the US and loosened in the rest of the world, the US current account deficit shrinks considerably, almost by a sufficient amount to restore sustainability.

One interesting aspect of the results is that changes in private consumption are smaller in the case of an internationally coordinated fiscal policy action than an uncoordinated one. This result seems to suggest that, from the point of view of welfare, internationally coordinated fiscal policy measures are to be preferred. We should, however, bear in mind that welfare-maximizing optimal fiscal policy does not in this context necessarily coincide with either fiscal contraction or expansion. The relevant research indicates rather that optimal fiscal policy should focus on mitigating or even undoing the adverse effects of sticky prices present also in the model Kortelainen uses in his study. This is not criticism of Kortelainen's exercise. On the contrary, it is a suggestion for further research with his model. Overall, we should not forget that methodologically and in subject matter his study represents an ambitious research effort. It contributes nicely to the process of establishing a practice wherein central banks use dynamic stochastic general equilibrium macromodels in policy simulations and more generally in their policy work.

Banks' loan announcements and stock market returns

Recent innovations in the credit derivatives market have improved lenders' ability to transfer credit risk to other institutions while maintaining their relationship with their customers. Such innovations have generally received a guarded welcome from supervisory authorities and policymakers, who recognize the benefits of allowing risk to reside in separate institutions from the loan originators. The benefits of diversification are widely thought to be significant, even though it not always easy to identify, let alone measure the extent of, these benefits. Despite these widely recognized benefits, the welcome has been guarded at least in part because policymakers are concerned that credit derivatives create moral hazard problems associated with asymmetric and hidden information. The relevant research has emphasized these incentive problems from two distinct angles. First of all, an incentive problem can arise if the lender purchases credit protection against the wishes of the borrower or without informing the borrower. In this case the purchase of the credit protection may send a negative signal about the borrower.

Secondly, the incentive problem can arise on the borrower side of the relationship. In the absence of well-functioning credit risk transfer markets, lenders will monitor borrowers and force them to choose and continue to run only first-best projects. This bank certification signals the borrower's quality to the market, allowing the borrower to combine costly loan finance with cheaper bond finance. If the borrower's equity is traded, the signal should also increase the stock price. However, when there are well-functioning credit risk transfer markets, reducing bank monitoring by insured lenders will reduce the value of bank certification. The equilibrium outcome may be that borrowers no longer want to pay a premium for bank certification and run first-best

projects, but instead issue bonds and run second-best projects.

On the other hand, there are studies arguing that credit risk transfer can enhance monitoring incentives, eg by making banks act in a tougher manner. Banks can also use portfolio credit risk transfers to reduce their exposure to the common factor in credit risk and retain idiosyncratic risk. Banks are rewarded for monitoring these risks, and, since the common factor in risk is removed, it now costs less capital to engage in monitoring. For a fixed amount of capital, monitored lending now increases following credit risk transfer, and there is some empirical evidence to support this theoretical implication.

In his empirical study ‘The effect of lenders’ credit risk transfer activities on borrowing firms’ equity returns’ (BoF 31/2006) Ian Marsh examines to what extent borrowers benefit from bank certification when banks have access to credit risk transfer mechanisms. Methodologically, the study belongs to the class of event studies and the data set consists of press releases from the Factiva database over the years 1999–2005 containing news of new loans by companies traded on the New York Stock Exchange. The set of press releases has been cleaned for various reasons, after which the author’s data set consists of 271 ‘clean’ press releases of new loan announcements. In line with the literature on the effects of new loan announcements on stock market prices, Marsh tests whether lenders’ activities in credit risk transfer markets affect stock market reactions to announcements of new loans by these lenders.

According to the estimation results, when the lending banks actively manage their credit risk exposure through large-scale securitization programmes, the reaction of stock market prices to loan announcements by these banks is statistically insignificant. If, on the other hand, a firm obtains a loan from an otherwise equivalent bank that does not issue credit risk transfer instruments, the data

flags a statistically significant increase in the firm’s stock price. Consequently, Marsh’s results seem to lend support to the idea that the equity market does not appear to place any value on news of loans extended by banks that are known to transfer credit risk off their books.

This is an interesting result and is not inconsistent with the view that the equity market believes that the use of large scale securitization programmes for credit risk management weakens banks’ monitoring incentives. The combination of this result with the evidence that banks that adopt credit risk management techniques also expand their loan portfolios can fuel the type of unstable financial market dynamics about which the famous financial historian Charles Kindleberger has so enthusiastically written: *‘excessive and unmonitored credit expansion can defy financial market stability and precipitate financial market manias that lead to market panics and crashes’*. It is clear that Marsh’s results and, more generally, research on credit risk transfer markets are highly relevant from the point of view of central banks and financial supervision authorities. Further research on this issue is, consequently, also needed in the future.

Can the Chinese trade surplus be reduced by adjusting the exchange rate?

China’s importance for the world economy has increased appreciably in recent years. Rapid economic expansion has boosted China’s share of world trade, and the Chinese trade surplus has also grown at a brisk pace. As a result, China has been under pressure to allow its currency to appreciate. In July 2005 China did revalue the renminbi’s external value by about 2%. Since then the renminbi has been strengthening against the US dollar, albeit very slowly. However, the dollar depreciation has weakened the renminbi eg vis-à-vis the euro. Inflation in China has also

been very low so that the real effective exchange rate has been relatively stable for almost ten years now. It should be noted, however, that even though a number of trading partners have called for revaluation of the Chinese currency in order to reduce the trade surplus, very little research has been done on the impact of the exchange rate on Chinese exports and imports.

This highlights the significance of the recent study by Alicia García-Herrero and Tuuli Koivu (Can the Chinese trade surplus be reduced through exchange rate policy?, BOFIT DP 7/2007), which analyses the implications of the exchange rate for Chinese foreign trade. The study looks at how the real effective exchange rate affects Chinese exports and imports. In order to identify the effects of the real trade-weighted exchange rate, the equations used control for the effects of other factors on exports and imports. These factors include China's industrial output growth, developments in world trade, China's tax incentives for exports and duties on imports, and the volume of foreign companies' investment in China. The study finds that China's exports and imports are highly sensitive to changes in the exchange rate. As expected, renminbi appreciation reduces China's exports. The net effects on the trade surplus are however constrained by the fact that imports to China also decrease with exchange rate appreciation. This is assumed to be related to China's strong position in the international production chains. Many companies import components into China from other countries, and the finished and semi-finished products assembled from these components are then exported abroad. When the price competitiveness of these final goods weakens because of currency appreciation, imports of components to China also decline.

In order to clarify this link, García-Herrero and Koivu also estimated export and import equations separately for China's main trading partners. On the imports side, there is considerable cross-country variation in the

results. When China's currency strengthens, imports decrease from those Asian countries that export mainly parts and components to China for further processing. By contrast, imports eg from Germany are to a greater extent targeted at the Chinese domestic market and tend to increase in response to appreciation of the renminbi. The response is similar for other euro area countries. US and Japanese exports to China, by contrast, are mainly components and machinery for the processing sector and other high technology products for which China has no substitutive production. These exports to China are not highly sensitive to exchange rate movements.

The results suggest that the net effects of exchange rate changes on trade flows appear to be smaller for China than for most other countries. This is largely explained by China's position in the international production chains. In order for exchange rate movements to have rapid and important effects on China's external balance, the renminbi would have to undergo a major revaluation.

Conferences and workshops

In May 2007, the Research Unit of the Bank of Finland arranged a two-day workshop on the use of dynamic general equilibrium models in forecasting processes in central banks. Participation was limited to invited institutions.

In June, a conference will be organised by the Research Unit in collaboration with Professor Iftekhar Hasan (Lally School of Management and Technology, Rensselaer Polytechnic Institute) and, for the first time, the Journal of Financial Stability (JFS). The topic of this conference will be 'Financial Instability, Supervision and Central Banks'.

In September, a conference will be organised with SUERF (Société Universitaire Européenne de Recherches Financières) and the topic will be 'Financial Markets, Innovation and Growth'. The call for papers is open until 15 May.

In November, the Research Unit and CEPR (Centre for Economic Policy Research) will organise a joint international conference for the eighth time. The topic will be 'Expectations and Business Cycle Dynamics'. The call for papers will open soon.

In December 2007, in concert with its cooperation partners, BOFIT will organise a scientific seminar to deal with the integration of Russia and China into the world economy. The call for papers will open soon.

Further information on conferences organised by the Research Unit may be obtained from www.bof.fi/en/tutkimus/konferenssit and on those organised by BOFIT from www.bof.fi/bofit_en/tutkimus/tyopajat.

Recent Bank of Finland research publications

Bank of Finland Discussion Papers

Risto Herrala – Karlo Kauko: Household loan loss risk in Finland – estimation and simulation with micro data, BOF DP 5/2007.

Benedikt Goderis – Ian W Marsh – Judit Vall Castello – Wolf Wagner: Bank behaviour with access to credit risk transfer markets, BOF DP 4/2007.

Ilmo Pyyhtiä: Why is Europe lagging behind?, BOF DP 3/2007.

Aaron Mehrotra: A note on the national contributions to euro area M3, BOF DP 2/2007.

Timo Korkeamäki – Yrjö Koskinen – Tuomas Takalo: Phoenix rising: Legal reforms and changes in valuations in Finland during the economic crisis, BOF DP 1/2007.

BOFIT Discussion Papers

Aaron Mehrotra – Jouko Rautava: Do sentiment indicators help to assess and predict actual developments of the Chinese economy?, BOFIT DP 11/2007.

Mikael Mattlin: The Chinese government's new approach to ownership and financial

control of strategic state-owned enterprises, BOFIT DP 10/2007.

Balázs Égert – Carol S. Leonard: Dutch disease scare in Kazakhstan: Is it real? BOFIT DP 9/2007.

Iikka Korhonen – Tuuli Juurikkala: Equilibrium exchange rates in oil-dependent countries, BOFIT DP 8/2007.

Nienke Oomes – Katerina Kalcheva: Diagnosing Dutch disease: Does Russia have the symptoms? BOFIT DP 7/2007.

Alicia García-Herrero – Tuuli Koivu: Can the Chinese trade surplus be reduced through exchange rate policy? BOFIT DP 6/2007.

Andrei V. Vernikov: Russia's banking sector transition: Where to? BOFIT DP 5/2007

Jesús Crespo Cuaresma – Tomas Slacik: An "almost-too-late" warning mechanism for currency crises, BOFIT DP 4/2007.

Barry Harrison – Yulia Vymyatnina: Currency substitution in a de-dollarizing economy: The case of Russia, BOFIT DP 3/2007.

Peresetsky, A. A. – Karminsky, A. M. – Golovan, S. V.: Russian banks' private deposit interest rates and market discipline, BOFIT DP 2/2007.

Yuqing Xing: Foreign direct investment and China's bilateral intra-industry trade with Japan and the US, BOFIT DP 1/2007.

Forthcoming publications

Bank of Finland Discussion Papers

Mika Kortelainen: Adjustment of the US current account deficit.

Juha Kilponen – Torsten Santavirta: When do R&D subsidies boost innovation? Revisiting the inverted-U shape.

Mikael Bask – Carina Selander: Robust Taylor rules in an open economy with heterogeneous expectations and least squares learning

Mikael Bask: Instrument and targeting rules in monetary policy when heterogeneity in currency trade.

David G Mayes – Maria J Nieto – Larry Wall: Multiple safety net regulations and agency

problems in the EU: Is Prompt Corrective
Action partly the solution?

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Iikka Korhonen and Aaron Mehrotra: Money
demand in post-crisis Russia: De-dollarisation
and re-monetisation.

Ian Babetskii and Nauro F. Campos:: Does
Reform Work? An Econometric Examination
of the Reform-Growth Puzzle.

Pertti Haaparanta and Tuuli Juurikkala:
Bribes and local fiscal autonomy in Russia.

Aaron Mehrotra and Jouko Rautava: Do
sentiment indicators help to assess and predict
actual developments of the Chinese economy?

Mikael Mattlin: The Chinese government's
new approach to ownership and financial
control of strategic state-owned enterprises.

