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What drives China's current account?☆

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A B S T R A C T

The paper offers an empirical taxonomy of the factors driving China's current account. A simple present-value model with non-tradeable goods explains more than 70 percent of current account variability over the period 1982–2007, including the persistent surpluses since 2001. It also correctly predicts the decline of China's current account since 2008. Expected increases in the prices of non-tradeables (e.g. housing and medical care) and expected declines in net output (GDP less investment and government spending) are the main channels of external adjustment. Much of China's current account surplus seems driven by shocks that have global effects by persistently depressing the world real interest rate. This is consistent with recent theoretical models that suggest that factors related to China's domestic financial development are key in understanding global imbalances.

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1. Introduction

China's persistent current account surplus has attracted considerable academic and public attention in the last years. It is often regarded as one of the main sources of a perceived imbalance in global capital flows and as the mirror image of the persistent U.S. trade deficit.

While a range of explanations have been discussed for China's surplus, surprisingly few attempts have been made to assess the relative merit of different mechanisms of China's external adjustment in a simple, unified theoretical framework.[1] This is what I seek to do in this paper. As the base of my empirical analysis, I use a simple intertemporal model of the current account with non-tradeable goods in the mold of Bergin and Sheffrin (2000). The model nests four basic channels of external adjustment: i) consumption smoothing, ii) net factor income payments, iii) consumption tilting due to expected changes in the world real interest rate and iv) consumption-tilting due to expected changes in the real exchange rate.

The main results can be summarized as follows: first, the simple model can explain more than 70 percent of the variation in China's current account over the period since 1982. It also explains most of the run-up in the Chinese current account surplus since the beginning of the 2000s and also correctly predicts the recent decline of China's current account surplus out-of-sample. This result may in itself be surprising since it is probably fair to summarize the tenor of the recent debate as implying that the textbook model (see e.g. Obstfeld and Rogoff (1995), ch. 2) would not fit China's recent experience. Turning to the channels of external adjustment, I identify consumption tilting due to expected rises in the relative price of non-tradeable goods and consumption smoothing (expected declines in net output growth) as the key factors. Net factor income plays only a negligible role whereas expected changes in the world interest rate are negatively correlated with China's current account.

I assess the robustness of my conclusions to various changes in the definition of China's external surplus and the definition of the real exchange rate. Some recent analyses have emphasized the role of trade mis-invoicing and measurement error in China's current account balance (see Lane and Milesi-Ferretti (2007), Zhang (2008)). To assess the importance of these issues for my conclusions, I also present results based on alternative calculations of China's external balance based on Zhang (2008). These changes do not affect the main result though: the model still replicates most of the variability in China's current account patterns, including the run-up of surpluses in the last couple of years.

How can these findings be interpreted? First, at a general level, it is surprising that a simple intertemporal model seems to fit some key aspects of the data so well. This would seem to be at odds with the bulk of the literature that has emphasized the importance of various frictions for the explanation of why capital tends to flow uphill, i.e. from major emerging markets to developed economies, primarily the US (see e.g. Caballero et al., 2008, Mendoza et al. (2009) and Song et al. (2011)). Domestic financial frictions, the presence of capital controls and the controlled exchange rate regime would *a priori* seem to violate the assumptions of the simple intertemporal model of the current account concerning international capital mobility. Furthermore, the size of China's economy invalidates the usually maintained assumption of a small open economy that is a price taker in world capital markets. I make the following remarks: first, the empirical analysis in the paper is based mainly on the log-linearization of an intertemporal budget constraint which, by itself, does not rest on particular theoretical assumptions about capital mobility or the impact of Chinese savings on world interest rates. The baseline intertemporal model of the current account essentially restricts this budget constraint only through the consumption Euler equation. In my theoretical setup below, I therefore also introduce a savings friction which drives a wedge between domestic and international interest rates and therefore also impacts on the consumption – Euler equation. As recently argued by Gourinchas and Jeanne (2009), such savings wedges (rather than frictions in capital accumulation) appear as prime candidates in explaining why emerging economies such as China run large current account surpluses. I show that – as long as the savings wedge is constant – the base-line log-linearized setup of my model remains unaffected vis-à-vis the setup without restrictions to capital mobility. It is therefore an

[1] See e.g. Gruber and Kamin (2007) for a panel study of Asian surpluses.