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A New Measure of Financial Openness

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Abstract

We create a new index that measures the extent of openness in capital account transactions. Despite the abundance of literature and policy analyses regarding the effect of financial liberalization, the debate is far from settled. One of the reasons for that outcome is the lack of proper ways of measuring the extent of the openness in cross-border financial transactions. We seek to remedy this deficiency by creating an index aimed at measuring the extensity of capital controls based on the information from the IMF's Annual Report on Exchange Arrangements and Exchange Restrictions (AREAER). This paper details how we construct the data and where our index stands in relation to the extant literature. Given the intricacy of capital controls policies and regulations, the exercise of quantifying the extent of financial openness remains a challenging task. Nonetheless, our index makes a substantial contribution in terms of

its coverage of countries and time period; the data are available for 181 countries for the 1970–2005 period.

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Notes

1. See Edison and Warnock ([2001](#)), Edwards ([2001](#)), Edison et al. ([2002](#)), and Kose et al. ([2006](#)) for discussions and comparisons of various measures on capital restrictions. For extensive reviews on capital controls policy or financial liberalization, refer to Dooley ([1996](#)), Eichengreen ([2002](#)), Kose et al. ([2006](#)), and Henry ([2006](#)).
2. The exceptions to be noted are Quinn ([1997](#), [2003](#)) and Miniane ([2004](#)) as we will discuss later.
3. This issue is somewhat alleviated by the recent disaggregation in the AREAER of the capital account restriction category. In 1997, AREAER started publishing the data on disaggregated components of capital controls, with the specification of thirteen categories including, for the first time, a distinction between restrictions on inflows and outflows as well as between different types of capital transactions. See Johnston and Tamirisa ([1998](#)) and Miniane ([2004](#)) for a descriptive overview and statistical analysis on the disaggregated data of AREAER.
4. Capital controls might be as stringent and command-and-control oriented as those imposed by the Latin American governments in the wake of the 1980s' debt crises, or

of a less dirigiste form such as the Chilean unremunerated reserve requirements (URR). See Edwards ([1998](#), [1999](#)).

5. Kose et al. ([2006](#)) and Rajan ([2003](#)) categorize the measures of capital financial openness de jure measures (based on IMF's AREAER); de facto measures based on price differentials such as the uncovered or real interest rate parity (Cheung et al. [2006](#)) and international arbitrage pricing model (IAPM) or capital asset pricing model (ICAPM) (see De Gregorio [1998](#)); and de facto measures based on quantities, i.e., volumes of capital flows as a ratio to GDP, such as Lane and Milesi-Ferretti ([2006](#)). A drawback of the price-based measures is that the measures, especially those based on the interest rate parity conditions, can reflect changes in macroeconomic conditions even if there is no regulatory changes on capital account transactions. Other sources for categorization of measures on financial integration and/or financial openness are Cavoli et al. ([2003](#)) and Takagi and Hirose ([2004](#)).

6. We initially constructed this index for Chinn and Ito ([2002](#), [2006](#)). We have updated the series annually since then while expanding the scope of countries.

7. Especially, the k3 category was divided into 13 categories. See Johnston and Tamirisa ([1998](#)) and Miniane ([2004](#)) for details.

8. The index is normalized with the highest degree of financial openness captured by the value of 100 and the lowest by zero.

9. It must be noted that, as can be seen in [Table 1](#), the coverage of countries and time periods differ greatly across different indexes.

10. Kaminsky and Schmukler (2001) calculate indices for domestic financial system, equity market, and capital account liberalization for a select number of developed and emerging market countries. The correlation with the overall composite index is 57.6 per cent while that with the component particularly on capital account transactions is 67.6 per cent.

11. Some indices are sector-specific. Edison and Warnock ([2001](#)) present an index of equity market openness.

Additional information

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