Dissertation Abstract   Juan Antonio Montecino

Dissertation Title: Three Essays on Capital Controls and International Macroeconomics

My dissertation is on the macroeconomic impacts of restrictions on international capital mobility – capital controls – and issues related to their implementation in developing countries. While there has recently been renewed theoretical and policy interest in capital controls, the empirical evidence is inconclusive regarding the ability of controls to limit the volume of capital flows or to influence the real exchange rate, prompting some to conclude that controls are not binding due to imperfect implementation or evasion by financial market participants. The primary aim of my dissertation is to improve our understanding of the effectiveness of controls.

My first essay and job market paper, "Capital Controls and the Real Exchange Rate: Do Controls Promote Disequilibria?," presents new empirical evidence that while capital controls may not influence the long-run equilibrium level of the real exchange rate, they nevertheless slow its adjustment dynamics and thereby increase the persistence of short-run over or undervaluations. These results stand in contrast to previous empirical studies, which have failed to find robust evidence that controls influence the real exchange rate and have thus cast doubt on their usefulness as a policy instrument. Using a panel cointegration framework for a large sample of developing and developed economies, I estimate the long-run cointegrating relationship between the real exchange rate and a set of fundamentals. This long-run relationship is used to calculate the extent of over or undervaluations – that is, of disequilibria – which are then imposed on an error-correction model to study short-run adjustment dynamics. Allowing the speed of adjustment to vary depending on the intensity of capital controls, I find evidence that real exchange rate disequilibria are more persistent in countries with strict capital controls. My benchmark results suggest substantial heterogeneity in adjustment dynamics, with half-lives ranging from as low as 2 years in countries with no capital controls, to 3.5 years in countries with very strict controls. This finding has direct policy implications for developing economies seeking to, for example, maintain a competitive real exchange rate in order to promote strategic industries in the tradable sector.

In the second essay of my dissertation, "Leaky Capital Controls in the Presence of Savvy Financial Markets," I assess the welfare rationale for imposing capital controls in the context of a developing economy with learning externalities in the tradable sector and an institutionally constrained regulatory authority. In the absence of first-best instruments to directly target the tradable sector, the "constrained planner" in my model imposes capital controls to cause private agents to internalize the learning externalities. However, capital controls are imperfectly binding due to a limited capacity to monitor the financial sector, which attempts to exploit regulatory loopholes in order to evade the controls. I show that capital controls can still be welfare enhancing even if these are imperfectly binding. I also establish that a "sophisticated" planner will always set a tax on inflows larger than is strictly necessary to internalize the externalities. This is because the planner understands that a fraction of the capital controls will "leak" due to financial sector evasion.

In the third essay, "Bound By Treaty: Capital Controls and Bilateral Investment Treaties," I study the impact of international investment treaties and the threat of foreign investor lawsuits on the determination of capital account policies. To investigate this relationship, I build a game-theoretic model of a monetary authority that chooses the intensity of capital controls in order to achieve a target level real exchange rate. Foreign investors suffer losses from the imposition of capital controls and, based on the content of the Bilateral Investment Treaty (BIT) between their host and national governments, have the option to sue the host government for these losses. The model predicts that capital controls will be inversely related to the ease with which investors can sue host economies in international courts. I then empirically test my model's predictions using textual data from 1446 BITs currently in effect, applying recent advances in automated content analysis. In particular, I apply the method of "structural topic modeling" to exploit content variations across BITs and construct a large set of indexes of various investment treaty features. For example, does a BIT include prudential safeguards? Does it contain investor-state arbitration mechanisms? My preliminary results suggest that capital account policies are indeed bound by treaty, in the sense that countries with more "investor friendly" BITs are less likely to deploy capital controls.