Notice of the Final Oral Examination
for the Degree of Doctor of Philosophy

of

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“Essays on Capital Flows and Capital Controls”

Department of Economics

Monday, April 27, 2020
1:00 P.M.
Conducted Remotely

Supervisory Committee:
Dr. Graham Voss, Department of Economics, University of Victoria (Supervisor)
Dr. Paul Schure, Department of Economics, UVic (Member)
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Dr. Charles Curry, School of Earth and Ocean Sciences, UVic

Dr. David Capson, Dean, Faculty of Graduate Studies
Abstract
This dissertation comprises four main chapters that examine issues surrounding capital flows and capital controls. Chapter 1 outlines the dissertation. Chapter 2 discusses several key themes in the literature on capital flows and capital controls. First, I discuss and compare the measures of capital flows and how they are commonly used. I show that net capital flows provide relevant information on investment-saving decisions. However, net capital flows may provide a false sense of security. Gross flows, on the other hand, provide information that is more relevant to financial stability. Second, I summarize various risks associated with capital flows into two broad categories and relate them to policy objectives against which the efficacy of capital controls is evaluated. I show that various macroeconomic risks associated with capital flows could be broadly grouped into (1) loss of export competitiveness and (2) increased financial instability. In terms of policy objectives, the main policy objectives are whether capital controls are able to (1) reduce real exchange market pressures, and (2) allow for a more independent monetary policy, (3) reduce the volume of capital flows, (4) alter the compositions of capital flows toward longer-maturity flows, and (5) reduce the frequency of disruptive adjustments such as currency crises and severe output loss. Third, I compare the framework used to document capital controls to the framework used to document capital flows. In doing so, I draw the *de jure* connections between measures of capital flows and measures of capital controls. Not only do the connections help one classify capital controls, but they also identify the exact types of capital flows that various types of capital controls intend to regulate. Fourth, I discuss major capital control indices in terms of the main considerations that are commonly involved to construct these indices, including (1) what to measure, (2) what asset categories to cover, (3) what data sources to use, and (4) what coding algorithms and weighting schemes to use to convert raw data to composite indices. Fifth, I compare and contrast major publicly-available capital control indices both at the world level and at a country level for selected countries (Brazil and South Korea). Finally, I synthesize studies on the effectiveness of capital controls and summarize possible factors that may have contributed to the inconclusiveness of the results from the existing studies. By surveying the literature, I find that possible factors include difficulties in (1) measuring capital controls, (2) obtaining capital flow data with high frequency, (3) standardizing the scope of capital flows, (4) addressing the selection bias problem, and (5) controlling for circumvention of capital controls and institutional quality.
Chapter 3 examines whether countries with capital controls are less likely to experience capital surges and capital stops. I use a propensity score matching method to address the issue of selection bias, which arises when observations with capital controls have distinct characteristics that influence both the probability of imposing capital controls and the probability of experiencing capital surges and stops. These distinct characteristics, when not properly controlled for, can give rise to a biased estimate of the effect of capital controls. I use a propensity score matching method on a large data set of country-time observations. The data set encompasses both developed and developing countries and covers the period 1995-2016. The results of Chapter 3 show that capital controls may be effective, but only for observations that have not imposed capital controls. In addition, only capital controls that involve the use of inflow controls appear to be effective.

Chapter 4 addresses why some episodes of gross inflow surges ended in financial crises. Using a common set of 53 countries that include both advanced and emerging countries, I show that both global factors (such as investors’ risk aversion) and domestic factors (such as domestic credit growth, foreign exchange reserves, institutional quality, and capital controls) play roles in explaining the endings of surge episodes. The effect of capital controls depends on a country’s institutional quality. For countries with lower institutional quality, imposing capital controls does not decrease the probability of hard landing. Capital controls only start to contribute to a lower probability of hard landings when the institutional quality of a country is above a threshold.

Chapter 5 examines the spillover effects of foreign-implemented capital controls. I propose—from a domestic country’s perspective—that foreign-implemented capital controls can affect domestic capital flows in the flowing ways. First, foreign-implemented inflow controls may reduce domestic outflows going into these foreign countries, due to the bilateral linkages between these foreign countries and the domestic country (the domestic-outflow-reduction hypothesis). Second, foreign-implemented outflow controls may reduce the domestic inflows from these foreign countries, again due to the bilateral linkages between these foreign countries and the domestic country (hereafter, the domestic-inflow-reduction hypothesis). Third, foreign-implemented inflow controls may deflect capital flows—originally going to these foreign countries—to the domestic country (hereafter, the deflection hypothesis). The findings of this chapter support the existence of spillover effects. For the three hypotheses, I find that tightening of foreign-implemented inflow controls—measured by increases in trade-weighted and
geographic-proximity-weighted inflow control indices of other countries in the rest of the world—reduces domestic outflows, while tightening of foreign-implemented outflow controls—measured by increases in trade-weighted and geographic-proximity-weighted outflow control indices of other countries in the rest of the world—reduces domestic inflows. In addition, tightening of inflow controls implemented in foreign countries—measured by finance-weighted capital control indices of other countries in the rest of the world—divert capital inflows away from the domestic country. The results suggest that foreign-implemented capital controls have signaling effects on domestic capital flows via common lenders. When one country implements inflow capital controls, the policy actions prompt the common lenders to perceive that other countries with similar borrowing patterns are likely to become less supportive of foreign investment. As such, global investors retreat their investment, leading to reductions in domestic inflows.