<CHT>**capital controls**

Capital controls are public policies that aim to curb or redirect flows of financial assets (e.g., bonds, loans, stocks, and foreign direct investments) across international borders, through taxes or various types of quantity restrictions. Governments use these policies as a means to generate fiscal revenues and for other economic and/or political reasons.

From an economic efficiency perspective, an important economic rationale for capital controls usually revolves around a "second-best" argument, that is, a distortion of the operation of free markets that cannot be eliminated. These distortions may be due to asymmetric information (when the two sides of a transaction do not have access to the same information), externalities (unaccounted for consequences of agents' decisions), financial sector problems, or other market pathologies. In such cases when the distortion cannot easily be eliminated, a policy that would have been clearly inferior to free markets (such as capital controls) can be used to counter the cost of the initial distortion.

The first modern era that was to a large extent free of capital controls and in which international financial markets became highly integrated occurred prior to World War I (1880–1914). During the war, and during most of the interwar period that followed, numerous countries, including all of the major participants in the international economy, relied on the heavy use of capital controls. During the post–World War II era of 1945–72, capital controls were also used, based on a set of agreements signed at Bretton Woods in 1944. This usage was supported by the International Monetary Fund (IMF). Under the Bretton Woods system, fixed exchange rates and capital controls protected countries from destabilizing external shocks. The IMF Articles of Agreement

allowed countries to retain capital controls, stipulating that countries could not draw on IMF resources to meet a "large or sustained outflow of capital" (IMF Articles of Agreement, Article VI, Section 1a).

The countermovement, which began with the breakdown of the Bretton Woods system in the 1970s, sought to remove government controls and allow markets to operate freely. Most developed countries removed the bulk of their restrictions on capital flows in the 1970s and 1980s, with the United States removing its main capital controls in 1974. A number of countries in Asia moved in the same direction during this period and were followed in turn by several South American economies at the end of the 1980s. The majority of African and Middle Eastern countries did not progress as far in liberalizing their capital accounts at the time. This process gained momentum in the early 1990s, with many developing countries removing most of their control on international capital flows. In the developing economies, this trend was seen as part of the neoliberal "Washington consensus," a set of liberalizing policies that included the decontrol of foreign direct investment.

The Asian financial crisis of 1997–98 fostered a wave of analyses that sought to determine its causes. Many analysts charged that the Asian countries that were hit the hardest had liberalized their capital accounts prematurely under pressure from the IMF. This criticism gave rise to intense skepticism about the wholesale removal of capital controls. This debate has spawned an extensive literature striving to evaluate the economic impact of the various types of capital controls.

<A>**Classifying Restraints on Capital Movements**

Restraints on capital flows may broadly be divided into those that focus on capital account transactions (*capital controls*) and those that focus on foreign currency transactions (*exchange controls*).

<B>**Capital Controls**

These involve constraining one or more elements of the balance-of-payments capital account. In principle they can cover foreign direct investment (FDI), portfolio investment, borrowing and lending by residents and nonresidents, transactions making use of deposit accounts, and other miscellaneous transactions. Within each of these categories, there may be a wide range of possible controls. For example:

<UNL>FDI by residents abroad or nonresidents domestically can be directly restricted, or restrictions can influence the repatriation of profits and initial capital, and the structure of ownership.

Portfolio investment restrictions can take the form of regulations on the issuance or acquisition of securities by residents overseas or by nonresidents domestically. Limitations on the repatriation of dividends and capital gains and transfers of funds between residents and nonresidents may also exist, as may “market-oriented” tax measures.

Regulations on external debt transactions largely take the form of ceilings or taxes on external debt accumulation by residents and firms (financial and nonfinancial institutions). Special exemptions are often provided in the case of trade-oriented enterprises or on a case-by-case basis, as determined by the regulatory authorities.

Restrictions on deposit accounts may be imposed on foreign currency deposits held locally by residents and nonresidents, or deposits held in local currency by residents abroad or by nonresidents overseas or locally.

Other capital controls entail restrictions on real estate, emigration allowances, and other forms of capital transfers.

<B>**Some Key Distinctions**

Mechanisms for seeking to restrain international capital flows may be applied on a *selective* or *comprehensive* basis; they can be based on *outflows* or *inflows*; they can be either *temporary* or *permanent*; and they can focus on direct *quantitative* controls or on using the *price mechanism* via explicit or implicit taxation.

<SH>*Selective versus Comprehensive*. Curbs on capital movements may be more or less extensive. At one end of the range, the capital account could be virtually inconvertible (i.e., comprehensive capital controls). India and China are notable examples in Asia. This being said, it is more typical for a country to impose controls selectively, on one or more items within the capital account. Of the 155 countries surveyed in an IMF study, 119 were reported to have imposed some type of restrictions on certain capital account transactions (Ariyoshi et al. 2000). Of the 119 countries with some controls, 67 were reported to use comprehensive controls. The distinction between selective and comprehensive controls may not be precise, however. For instance, even India and China have relative freedom in some forms of capital movements (such as FDI). The distinction is therefore more of degree than of kind. A generally illiberal regime, that is, one with

comprehensive controls, typically has a "positive list" of exceptions to the controls. A generally liberal regime, that is, one that imposes controls selectively, is likely to have a "negative list" of items to be controlled.

<SH>*Outflows versus Inflows*. What is the purpose of restraints on capital outflows? First, restraints can slow the speed of capital outflows when a country is faced with the possibility of a sudden and destabilizing withdrawal of capital during a time of uncertainty. Second, they are supposed to break the link between domestic and foreign interest rates, recognizing that a country cannot maintain a flexible exchange rate regime, monetary policy autonomy, and an open capital account all at once (i.e., "impossible trinity"). Thus, crisis-hit economies could conceivably pursue expansionary monetary and credit policies as a means of growing their way out of debt or a recession without having to worry about possible capital flight and the weakening of the currency.

Controls on capital inflows have become more common since the mid-1990s and are meant to minimize the chances of an abrupt and sharp capital reversal (bust) in the future. These are sometimes referred to as "speed bumps" or "sand in the wheels" of the international financial system. Empirical studies have indicated that capital controls have been more effective at preventing "excessive" capital inflows than at stemming capital flight (Mathieson and Rojas-Suarez 1993).

The most prominent example of these controls is the Chilean *encaje*, implemented between 1991 and 1998. The *encaje* was the requirement that a fixed percentage (initially 20 percent) of any short-term capital inflow be deposited in a non-interest-bearing account at the Chilean Central Bank for at least three years. The *encaje*'s aim was to slow

down capital inflows, prevent an appreciation of the Chilean peso, and discourage short-term flows and shift more flows into less destabilizing inflows with longer maturities.

<SH>*Temporary versus Permanent Restraints*. Temporary restraints are seen as a deterrent to excessive outflows or inflows during an "extraordinary" period. When a country is facing the possibility of capital flight, for example, temporary restraints give policymakers time to make appropriate changes in economic policy. Conversely, temporary restraints may be imposed when an economy experiences unsustainably large capital inflows, due to excessive confidence in the growth prospects of the economy (i.e., "irrational exuberance").

The rationale behind temporary restraints arises from the fear that such capital surges could lead to a loss of competitiveness through a real exchange rate appreciation (sometimes referred to as the "financial Dutch Disease phenomenon") (Calvo et al. 1996). In addition, the literature on optimal sequencing of economic liberalization has emphasized the need to reform the financial sector in conjunction with putting in place adequate prudential regulation so as to limit the possibility of systemic risks, before attempting to decontrol capital account transactions. As such, temporary controls may allow reforms to be phased (for instance, see Eichengreen et al. 1999).

Permanent controls are seen as necessary even during "normal" times. The rationale here is that even if all the microeconomic distortions are eliminated and macroeconomic policies are generally sound, certain inherent market failures will cause suboptimal decisions to be made in a decentralized and free market economy. Insofar as these market failures are prevalent in a laissez-faire economy, they may provide a rationale for permanent, rather than event-specific or transitory, capital restraints.

<B>**Direct/Administrative versus Market/Price-Based Restraints**

Restraints can either directly control market movements or they can be a market-based mechanism that alters the structure of price incentives market participants face, thereby inducing them to modify their behavior. Direct controls can generate such problems as bribery and corruption, high enforcement costs, and the inevitable creation of a black market. These drawbacks have generally led economists to prefer cost-based levies, which also may generate tariff revenues, over quantitative restrictions.

<B>**Exchange Controls**

Exchange controls regulate the rights of residents to use foreign currencies and hold offshore or onshore foreign currency deposits. They also regulate the rights of nonresidents to hold domestic currency deposits onshore. In addition, they may be defined to include taxes on currency transactions and multiple exchange rate practices that are aimed at influencing the volume and composition of foreign currency transactions. Exchange controls are not necessarily aimed at restricting capital flows; they are occasionally intended only to restrict the current account (trade in goods and services). Yet, strictly speaking, currencies are simply another type of financial asset, and therefore these controls amount to restrictions on trade in assets. Furthermore, whatever their original intention, exchange controls generally have a significant impact on the capital account.

<A>**Data on Capital Controls**

The primary source for internationally comparable data on capital controls is the IMF *Annual Report on Exchange Arrangements and Exchange Restrictions* (AREAER). The publication contains a detailed description of the legal framework that governs the capital account and is published annually, providing data relating to a large number of countries. Prior to 1996 the IMF reported only whether the country had imposed restrictions; after 1996 the publication includes a much more detailed description of the legal regime governing the capital account.

A number of researchers have devised various numerical indicators of the degree of capital account openness/controls, using the IMF AREAER dataset in addition to primary country sources (e.g., Miniane 2004; Edwards 2006). Several researchers alternatively focus on stock markets and detail various aspects of their actual or de jure state, such as when stock markets are open to trading by foreigners, or when domestic companies are allowed to cross-list abroad (e.g., Henry 2003; Edison and Warnock 2003; Bekaert et al. 2005).

This research agenda is still in its infancy, with little agreement among researchers on the appropriate measures and wide agreement on their respective drawbacks. As data quality improves economists should be better able to analyze and distinguish among the effects of various types of controls.

<CR>*See also* asymmetric information; balance of payments; Bretton Woods system; capital mobility; convertibility; currency crisis; exchange rate regimes; financial crisis; financial liberalization; hot money and sudden stops; impossible trinity; International Monetary Fund (IMF); Tobin tax; Washington consensus

<BIBH>**Further Reading**

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