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**FINANCIAL GLOBALIZATION:  
UNEQUAL BLESSINGS**

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**FINANCIAL GLOBALIZATION:  
UNEQUAL BLESSINGS<sup>⊗</sup>**

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**Abstract**

This presentation outline describes our framework to analyze financial globalization. It argues that financial globalization needs to take into account the relation between money (particularly in its role as store of value), asset and factor price flexibility, and contractual and regulatory institutions. Countries that have the “blessed trinity” (international currency, flexible exchange rate regime, and sound contractual and regulatory environment) can integrate successfully into the world financial markets. But developing countries normally display the “unblessed trinity” (weak currency, fear of floating, and weak institutional framework). It is difficult for developing countries to achieve the blessed trinity. Their alternatives are to reach either the “dollar trinity” or the “peso trinity,” neither of which is the real thing, but may do in terms of limiting risks and reaping benefits of international financial integration.

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## 1. A Framework for Globalization

- Financial globalization is not new, but is taking new forms.
- Financial globalization also poses new and complex problems.
- These problems have no easy solutions.
- The successes and failures (mostly crises) are linked to the nature of interactions between three elements:
  - Money – particularly in its role as store of value
  - Asset and factor price flexibility
  - Contractual and regulatory institutions
- We propose a framework to understand the main issues for emerging economies in achieving a successful financial integration.

## 2. Blessed Trinity

- Take as given the current world of high (and volatile) capital mobility and increasing provision of financial services across borders, coupled with weak *international* institutions and governance.
- Then, a country can integrate successfully into international financial markets to the extent that it exhibits the “blessed trinity.”
- The blessed trinity is defined as the fundamental (mutually reinforcing) setup of:
  - international currency
  - flexible exchange rate regime
  - sound contractual and regulatory environment
- The lack of one of these factors, or major shortcomings thereof, leads to risk-laden financial integration—i.e., integration that fails to a significant degree to reap the benefits of financial globalization and that, in the extreme, results in recurrent financial turbulence and crises.

### □ International Currency

- A country has an international currency if it is accepted as a reserve asset by residents of other countries.
- A country with an international currency can issue debt denominated in its own currency in international markets.
- An international currency is a store of value for foreigners and, *a fortiori*, also for domestic residents, who would thus be willing to save in domestic-currency denominated assets.
- A currency that is a store of value at home and abroad is underpinned by credible macroeconomic policies and, ultimately, by a *sustainable fiscal process*, which ensures the solvency of the currency issuer and minimizes the risk that the government may resort to the inflation tax.

#### □ Flexible Exchange Rate Regime

- A country has a flexible exchange rate if it allows its currency to float relatively freely against other currencies, *without* “life jackets” (Calvo). That is, without the need to hold large amounts of international reserves in an attempt to give credibility to the float.
- The effectiveness of the flexible exchange rate system is institutionally underpinned by a *reputable central bank*.
- Flexibility in the price of the currency is linked to a broader setting of flexibility in the prices of financial assets, liabilities, and contracts.

#### □ Sound Institutional Framework

- A sound contractual and regulatory environment adequately minimizes principal-agent problems that are inherent to financial systems. It does so by ensuring contract enforcement (finance is contract-intensive) and reducing its costs, and by minimizing information asymmetries.
- Contract enforcement is underpinned by clear shareholder and creditor rights and the *rule of law*, backed by a trustworthy judiciary.
- A sound regulatory environment is underpinned by a *reputable supervisory agency*, which conducts prudential oversight rigorously and in a *market-friendly* way, to foster risk awareness and market discipline.
- Incentives for undue risk taking and looting are reduced through, among other things, good accounting and information disclosure standards, risk-based capital requirements, private sector monitoring complemented by official monitoring, and effective exit/resolution frameworks.
- A country endowed with the trinity displays a well-functioning safety net—one that carefully controls risk shifting to the government (moral hazard) while limiting contagion risk and fostering sustainable financial deepening.
- Ultimately, the soundness of the contractual and regulatory environment is directly linked to the quality and strength of government and of democratic institutions.

#### □ Blessed Trinity Empowers Globalization

- A country blessed with the trinity can integrate successfully into international financial markets because the components of the trinity interact in a virtuous way to control the risks of financial globalization while maximizing its benefits.
- The sound contractual and regulatory environment promotes sustainable financial deepening and is fundamental to reducing country risk and its volatility.
- The “international” nature of the domestic currency minimizes currency mismatches—households and corporations with incomes in domestic currency can and do borrow in domestic currency at reasonable cost; and hedging against foreign exchange risk is feasible for the domestic economy as a whole because foreigners are willing to take the “other side” of the risk, by accepting domestic-currency denominated assets.

- By providing a credible store of value, the domestic currency, together with a sound contractual and regulatory environment, gives rise to deep and liquid markets for long-duration, domestic-currency denominated financial assets (e.g., equity securities, long-term loans at fixed interest rates, etc.), thereby minimizing maturity mismatches.
- The central bank, as an issuer of an international currency, can also be an effective lender of last resort—the ultimate and credible provider of liquidity, capable of fending off unnecessary contagious runs.
- The combination of an international currency with a flexible exchange rate regime underpins two privileged policy capacities.
  - First, the capacity to conduct counter-cyclical monetary policy—i.e., to smooth out cyclical output and employment fluctuations.
  - Second, the capacity rapidly to adjust the relative price of tradables to non-tradables (and, thus, the value of income and of debt in terms of tradables) in the face of shocks, *without* major balance sheet disruptions.
    - In particular, when a shock calls for a real exchange rate depreciation, it can be achieved by a nominal depreciation which, on the one hand, immediately raises the ratio of debt to income to its “true” level, *promoting timely adjustment and, on the other, transfers wealth from savers to debtors, improving debtor capacity to pay and, hence, strengthening the banking system.*
- The combination of a reputable central bank with the fact that savings are invested domestic-currency denominated financial assets curbs the risk that the governments would succumb to time inconsistency (i.e., the incentive to inflate away its liabilities after it has issued them).
  - Such a government would prefer not to pay the political cost of wiping out the value of workers’ savings through surprise inflation.
  - The trinity protects savers, who respond by sticking to the domestic currency as a store of value.
- Moreover, the existence of the blessed trinity is an expression of a mature market economy, where price signals are reliable guides for resource allocation, and where financial assets and relevant risks are adequately priced.
  - In other words, the trinity shines brighter where missing markets are less of a problem.
- The few countries in the world (United States, Germany followed by the European Union, England, Japan until recently) that are blessed with the trinity can embrace financial globalization in a relative safe manner and reap its benefits, in spite of the highly deficient international financial architecture.
- These countries dominate world affairs, politically and economically.
- A troublesome corollary is that these countries, endowed as they are with the trinity, have little incentive to reform the international financial architecture, the benefits of which would disproportionately benefit the emerging economies.

### 3. Unblessed Trinity

- At the other extreme is a typically small, open, unstable, and underdeveloped country, dramatically far from the blessed trinity.
- The unblessed trinity is defined as the interaction of:
  - weak currency
  - fear of floating
  - weak contractual and regulatory environment
  
- Weak Currency
  - An unblessed emerging economy has a weak currency.
  - A weak currency is neither accepted internationally nor domestically as a reliable store of value.
  - Even after years of low inflation, the unblessed country finds that its currency is not a store of value at home, with domestic savers preferring to save mainly in dollars (asset dollarization) or only short-term in pesos.
  - As a result, there is little or no funding for long-term domestic-currency denominated lending and non-dollar earners end up with dollar (domestic and external) debts, i.e., the most troublesome version of “liability dollarization” (Calvo).
  - The role of the domestic currency as a store of value is very limited and subject to high uncertainty, leading to a continuous peso problem which, in turn, increases intermediation margins and the cost of borrowing in the domestic currency, further fostering liability dollarization.
  - As a result, markets for long-duration, domestic-currency denominated financial assets are virtually non-existent and maturity mismatches abound in the domestic financial system.
  - The coexistence of maturity and currency mismatches are the manifestation of a particular problem of missing markets, which Hausmann has called the “original sin” (see Hausmann and Eichengreen).
  
- Fear of floating
  - An unblessed county has fear of floating.
  - This country may try to have a flexible exchange rate in order to pursue inflation targeting and in the hopes of eventually unwinding financial dollarization. But it finds itself with little scope for exchange rate flexibility.
  - Fear of floating arises in part because of the problem of liability dollarization (Calvo and Reinhart).
  - The limited floating that may occur is done with “life jackets” (high levels of international reserves) (Calvo).
  - This country also finds that it has no room for counter-cyclical monetary policy.
  - Rather, it is systematically compelled to raise interest rates during bad times to convince investors not to flee.

- In addition, it finds that last resort lending on the basis of money-printing is perilous and that, as a result, its capacity to be a lender of last resort function safely is tightly limited to its capacity to be a borrower of last resort (Calvo).
  - But being a borrower of last resort proves to be an uphill task in turbulent times, as international market finance tends to dry up and borrowing in domestic markets is possible only at high cost and at short maturities.
  - This further exacerbates the fear to float, the counter-cyclicality of monetary policy, and the perceived need for more “life jackets.”
- **Weak institutions**
- An unblessed country has a lousy contractual and regulatory environment.
  - It rates poorly in terms of rule of law and its judiciary is unreliable and plagued by corruption.
  - Fiscal, monetary, and regulatory institutions are weak, reflecting deeper weaknesses in overall governance and democratic institutions.
  - Accounting and information disclosure practices are sub-standard.
  - Shareholder rights and creditor rights are ill defined and poorly enforced.
  - As a result, principal-agent and information asymmetry problems are rampant, which fosters excessive risk taking and looting in the financial system, thus compounding the vulnerabilities that stem from the poor performance of its currency as a store of value.
- **Unblessed Trinity Handicaps Globalization**
- All of the above conspire to boost risks as the unblessed country integrates itself into international financial markets.
  - The typical problems have been identified in recent research.
    - For instance, unblessed countries with fear to float have a revealed preference for nominal exchange rate stability (Hausmann et. al.) with the result that international reserves provide a “double guarantee” (for bank deposits and for the currency), which heightens the country’s vulnerability to speculative attacks (Dooley).
    - Also, with liability dollarization, unblessed countries find that using the nominal exchange rate to adjust the real exchange rate in the face of shocks is painful and risky.
    - In particular, a nominal exchange rate depreciation has major adverse balance sheet effects—it erodes the solvency of debtors that earn in domestic currency but have dollar debts and, thus, it harms the banking system.
    - This increases the vulnerability to self-fulfilling attacks. In addition, the moral hazard resulting from poor regulation and fear to float leads to over-borrowing, which magnifies boom-bust cycles (Krugman).
    - Credit and asset bubbles, furthermore, exacerbate information asymmetry problems, planting the seeds for subsequent crises (Gavin and Hausmann).



- In all, countries that are too far from the blessed trinity will tend to suffer more than benefiting from financial globalization.
  - An unblest trinity is associated with a severe problem of missing markets—for the country’s currency, for long-term domestic-currency denominated finance, for hedges, for insurance products, etc.
  - As a result, the integration of unblest countries into the international financial markets tends to magnify both the deficiencies in domestic policies and institutions *and* the deficiencies of international markets themselves.
  - This exacerbates the vulnerability of the unblest country to shocks, leading to a higher incidence of multiple equilibria problems, with a consequent higher incidence of capital flow reversals (Calvo’s “sudden stops”), self-fulfilling runs, and twin crises (Bordo et al; Reinhart and Kaminsky).
- Blessings for the Unblest?
- Can developing countries achieve the blessed trinity?
  - Perhaps, but for most developing countries it would be very difficult and would take a long time.
  - What is more likely is that they adopt two more realistic, alternative solutions, which are described and assessed below.

#### 4. Two Trinities for the Tropics

- Unblest countries may be tempted to conclude that they should isolate themselves from financial globalization.
- But that is certainly not a desirable option, and possibly also not a feasible one.
  - A country completely isolated from international capital and financial services is likely to be poorer and with poorer growth prospects compared even to unblest countries attempting to integrate.
  - This is in part because the latter would be under constant external pressure to improve their domestic policies and institutions.
  - Moreover, given ongoing financial innovation and the revolution in information technology, it is highly doubtful that capital controls can successfully keep domestic residents locked away from international financial markets.
  - Low cost alternatives continue to proliferate whereby resident households (particularly the well-off) and corporations (particularly the large ones) can move their wealth abroad, borrow abroad, and access other financial services in international markets.
  - Finally, it seems suicidal for an unblest country to systematically scare away foreign direct investment and finance, in order to remain isolated.
- The problem for an emerging economy, thus, is not whether but how to integrate into world financial markets.

- Part of the answer has been implicitly given in the previous sections: by striving to establish the trinity or at least mimicking its main features, or by taking actions whose effects compensate for not having the full trinity.
- The complication is, however, that partially approximating the trinity entails important tradeoffs.
- Depending on what component of the trinity is deemed relevant, two alternatives appear feasible.
- These two alternatives focus on the exchange rate.
- The currency regime has been the one of the component of the trinity subject to intense scrutiny in the late 1990s, leading to a fairly generalized condemnation of fixed-but-adjustable exchange rates.
- It has in effect become standard to blame the moral hazard produced by pre-announced nominal exchange rates as one of the main culprits for the short-term capital inflow bubbles that subsequently burst into crises.
- The world of economists appears divided between the advocates of flexible exchange rate regimes and the advocates of hard pegs or outright dollarization. These two extremes give rise to *two trinities for the tropics*.

#### □ Dollar Trinity

- This trinity focuses on “weak currency” side of trinity.
- The premise is that the peso (or local currency) will never be a strong store of value.
- Therefore, countries should formally dollarize, even unilaterally.
- Advantages: Some advantages of the dollar trinity are the following.
  - This proposal aims at correcting in a single move the problems created by a weak currency, particularly in emerging, small open economies where de facto financial dollarization has become ingrained.
  - It immediately provides savers with a currency that is an unquestionable store of value while eliminating currency risk.
  - Thus, formal dollarization facilitates financial intermediation and deepening, fosters the lengthening of maturities in financial contracts, and substantially eliminates such volatility in capital flows that originates in perceptions of currency risk..
  - As a consequence, other things equal, formal dollarization reduces the scope for multiple equilibria, thereby reducing the probability of self-fulfilling attacks, sudden stops, and financial crises.
  - Furthermore, as Ecuador’s experience illustrates, formal dollarization can rapidly arrest the erosion in fundamentals and put a floor to runaway financial turbulence.
  - In addition, dollarization severs the direct link between fiscal solvency and the currency as store of value, which facilitates the deepening of financial intermediation even where fiscal problems exist.
    - To be sure, the indirect links between fiscal viability and the financial system remain. In particular, a bad fiscal policy raises

- country risk and adversely affects local debt markets. A default on government debt would damage the banking system to the extent that they hold claims on the government.
- In all, dollarization fosters international financial integration by equipping the country with at least one of the components of the blessed trinity.
- Pitfalls: Some pitfalls of the dollar trinity are the following.
    - Proponents of dollarization often fail to highlight the fundamental role of sound domestic institutions (including contractual and regulatory environment) in ensuring successful international financial integration.
      - ⊙ Ecuador may share the same currency as California, but “borders” for Ecuador have an essentially different meaning than for California, because the nature and quality of the institutions at each side of the border matters.
    - Proponents also tend to underestimate the drawback of not being able to adjust *rapidly* the *real* exchange rate (the relative price of tradables to non-tradables) in the face of adverse shocks. (As long downward price rigidities exist, such adjustment in a dollarized economy can only come slowly overtime, through unemployment and deflation.)
      - ⊙ This drawback is more worrisome for a dollarized emerging economy that has a relatively large non-tradable sector and a significant part of its external trade is with non-dollar countries that can freely devalue their currencies. That is, it is a greater drawback where there is a major inconsistency between the country’s dollarized financial structure, on the one hand, and its trade and productive structure, on the other.
      - ⊙ A specific and highly relevant corollary is that policy makers and politician would tend to overstate real income in the face of adverse shocks and, thus, fail to make the appropriate policy adjustments on time, magnifying the crisis down the line.
        - A major adverse shock immediately results in a new, more devalued *equilibrium* real exchange rate, but dollar income would not adjust downward rapidly (as it would, through nominal devaluation, if the country had a flexible exchange rate) to the new equilibrium, but over time through slow deflation. In the process, the reported debt to income ratio would be understated (capacity to pay overstated) relative to its equilibrium value. When a protracted recession and deflation drive home the harsh reality, it might be too late and the country may face the danger of the same self-fulfilling attacks it sought to immunize itself against when it adopted formal dollarization.
  - The dollar trinity needs complements. Some of them are the following.
    - Nominal flexibility in factor and asset prices, to avoid delays in reflecting the true value (in terms of tradables) of stocks and flows. In particular,

wage setting in the dollarized emerging economy should take into account the dollar value of wages in neighboring developing countries with which they trade or with which they compete in common foreign markets

- Substitutes to lender of last resort, including relatively high liquidity requirements for the banking system (possibly a narrow bank structure), as well as automatic access to contingent lines of external credit.
- Substitutes for lack of counter-cyclical monetary policy. In particular, this points to fiscal institutions (e.g., a fiscal responsibility law coupled with systematically setting fiscal objectives in terms of a “structural” deficit, a-la Chile).
- Stronger prudential oversight and market monitoring.
  - Prudential regulations would include a system of “counter-cyclical” provisioning requirements (like that recently introduced by the Bank of Spain). This would be crucial to address the problem of overstated payment capacity during a slow, deflation-based transition to a new, more depreciated *real* exchange rate.

#### □ Peso Trinity

- This trinity focuses on “fear of floating” side of trinity
- The premise is that fear can and should be overcome
- Therefore, move to inflation targeting
- This is perhaps the most popular prescription in Washington and among policy makers (particularly of the larger Latin countries).
- The proposed formula calls for, on the one hand, raising the quality of the domestic contractual and regulatory environment towards industrial country standards and, on the other hand, moving towards a flexible exchange rate cum inflation targeting.
- Credible macroeconomic policy is relied upon trying to establish the domestic currency as a credible store of value, at least at home.
- Advantages: Some advantages of the peso trinity are the following.
  - If successful, the country would have a suitable means to cope with shocks and even gain some room for counter-cyclical monetary policy in a world of high capital mobility.
  - This combination is seen by many as the most likely to succeed in rooting out domestically-generated moral hazard.
  - Uncertainty over the precise path of the nominal exchange rate would prevent agents from taking unhedged dollar positions (thus curbing the liability dollarization phenomenon) while encouraging the development of markets for hedges.
  - Both would join forces in reducing the vulnerability of the currency and of the financial system to shocks and in dampening boom-bust cycles.
- Pitfalls: Some pitfalls of the dollar trinity are the following.

- This popular prescription tends to underestimate the handicap resulting from the lack of an international currency, or of at least a currency that is accepted fully as a store of value at home.
- It also tends to understate the problems that an emerging country with a severe problem of liability dollarization (defined in this paper as dollar debts of non-dollar earners) would confront in moving towards exchange rate flexibility.
  - The prescription often not only underestimates the balance sheet effects of a devaluation in a de-facto financially dollarized economy but also fails to provide a realistic policy road map for such a countries to induce a voluntary de-dollarization.
- Even where liability dollarization is not a major problem, the prescription tends to underestimate the complexities involved in overcoming maturity mismatches—which is another manifestation of a currency that is not fully established as a store of value at home.
  - Markets for long-duration financial contracts are conspicuously missing even in the case of larger Latin countries where non-dollar earners have their debts mostly denominated in the domestic currency, and even if these countries display relatively successful macroeconomic policies, relatively flexible exchange rate regimes, and improving regulatory and contractual environments.
- The peso trinity needs complements. Some of them are the following.
  - Mainly, nurture peso as a store of value by building a strong record of consistent, credible macroeconomic policy.
  - This entails maintaining an autonomous and credible monetary authority, a viable fiscal process, and a well-designed and executed system of government debt management.
  - The country may also need to resort to complementary actions to develop a market for long-term finance, including allowing the indexation of financial contracts to non-tradable prices (through a Chile-type UF).
  - A sound regulatory and contractual environment that would limit excessive financial risk taking, protecting the solvency of the banking system and, indirectly, that of the fiscal process.

## 5. Building Institutions

- Both the dollar and peso trinity need to be backed by stronger institutions, although, as hinted above, institutional reform will have to give priority to addressing the specific challenges posed by each trinity.
- Improving the contractual and regulatory environment is fundamental. No country can go wrong taking steps in that direction.
- Better institutions make an emerging country more fit to join in the financial globalization process. In particular, they increase the capacity of the domestic financial system to intermediate prudently large international capital flows.

- Conversely, financial globalization itself puts pressure, often through harsh market discipline, on emerging economies to improve their policies and institutional framework.
  - Stronger institutions make the emerging country a more attractive place for foreign banks and other financial service providers to establish physical presences.
  - This, in turn, enables the recipient country to leapfrog because blue-chip foreign service providers embed the risk management practices and regulatory standards of industrial countries.
  - The entry of first-rate foreign banks is indeed a way in which an emerging economy can “buy” immediately the high-quality regulatory services that would take many years to build at home.
- To be sure, improvements in the contractual and regulatory framework may not necessarily result in bigger local markets for certain financial services, but they would certainly enhance the access of resident corporations (at least in the case of larger countries and for the larger corporations) to financial services supplied abroad (Claessens, Klingebiel, and Schmukler).
- The international community has come to the aid of the effort of improving domestic financial systems and their institutional underpinning by creating a large set of international standards—on banking regulation and supervision, on transparency in financial policies, on payments systems, on securities markets, on insurance sector regulation and supervision, on corporate bankruptcy, on accounting norms, etc. It has also developed programs (particularly the joint IMF-World Bank Financial Sector Assessment Program) to better monitor the vulnerabilities of domestic financial systems.
- Institutions also need to address other idiosyncratic problems
  - Unequal access to financial services
  - Local vs. global provision of financial services
  - Sequencing: build as you open
- And institutions need to address international market issues
  - Contagion
    - Calvo’s proposal for an Emerging Market Fund
  - Defaults
    - International bankruptcy proceedings?
    - The use of existing contracts—e.g., exit consents.
    - Meltzer’s (?) proposal for multilateral agencies to set a floor price to sovereign debt, in the context of a debt-reduction negotiation, in order to facilitate agreement on the needed haircut.
  - Externalities of fluctuations in international currencies
    - An eventual return to a Bretton Woods type system for exchange rates?
    - How to curb competitive devaluations?
- The role of multilateral agencies.

## 6. Some Blessings for the Unblessed

- We conclude by arguing that there are some blessings for the unblessed.
- Countries cannot go wrong by strengthening their domestic institutions.
- But they would be better off by adopting *either* the dollar trinity *or* the peso trinity and doing the necessary institutional reforms to implement these trinities right.
- Other intermediate solutions—e.g., soft pegs and a “weak” currency—are likely doomed to fail.
- It remains to be discussed which countries in the tropics should adopt one trinity or the other. This is not an easy question, but has already received much interest in the recent debate. As has been argued, “one size does not fit all.” (Frankel) And for some countries that are already highly dollarized de facto, the peso trinity may not be an option in the short to medium term.
- The international financial community also needs to speed up the pace of the reforms to help countries achieve a successful globalization.
- Improving the international financial architecture would disproportionately benefit trinity-challenged emerging economies. Unfortunately, the trinity-endowed large industrial countries have little incentive to do so.
- Individual countries that globalize have fewer policy instruments, so they need to coordinate with other countries to prevent future crises and maximize the benefits of globalization.











