

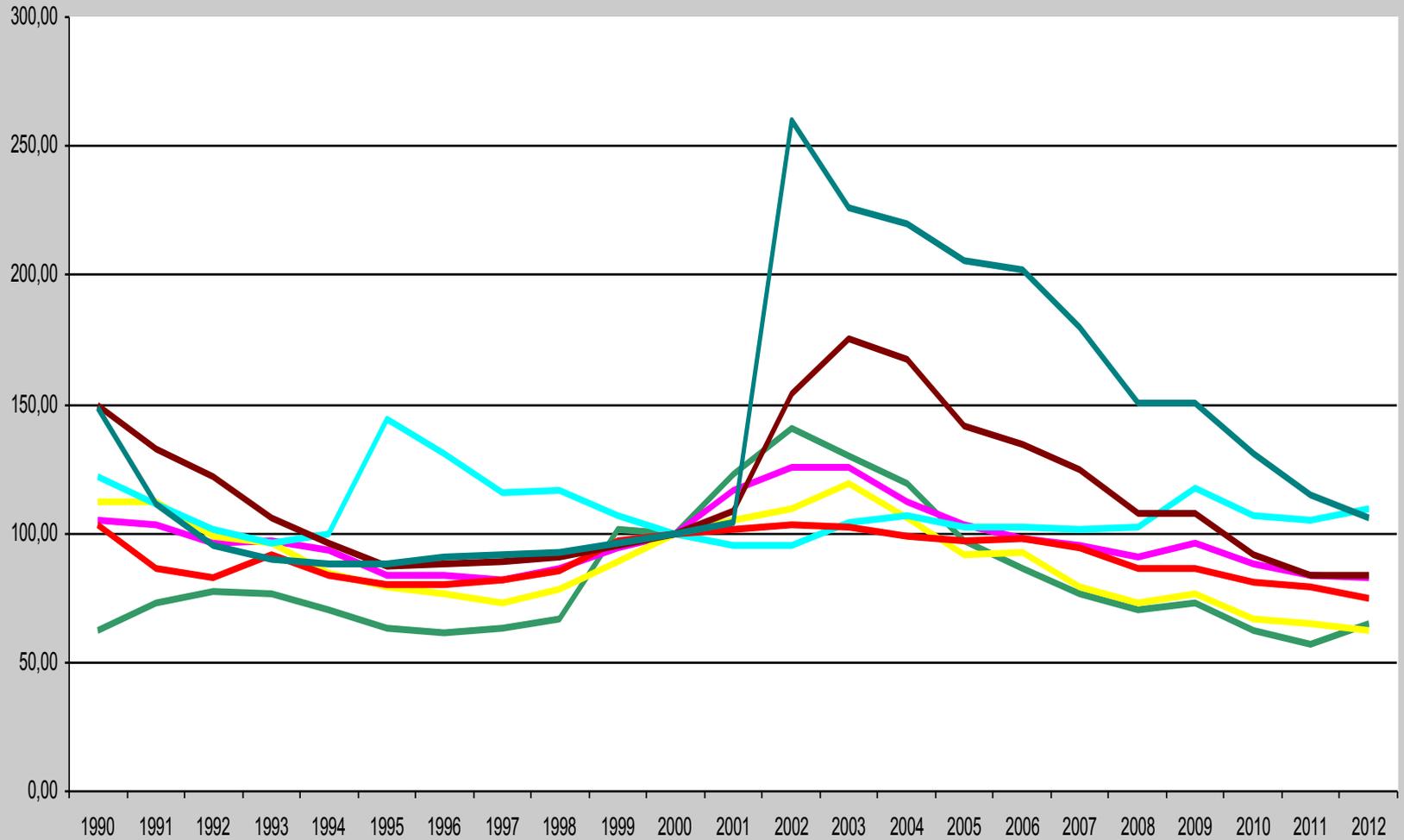
Managing a Competitive Real Exchange Rate

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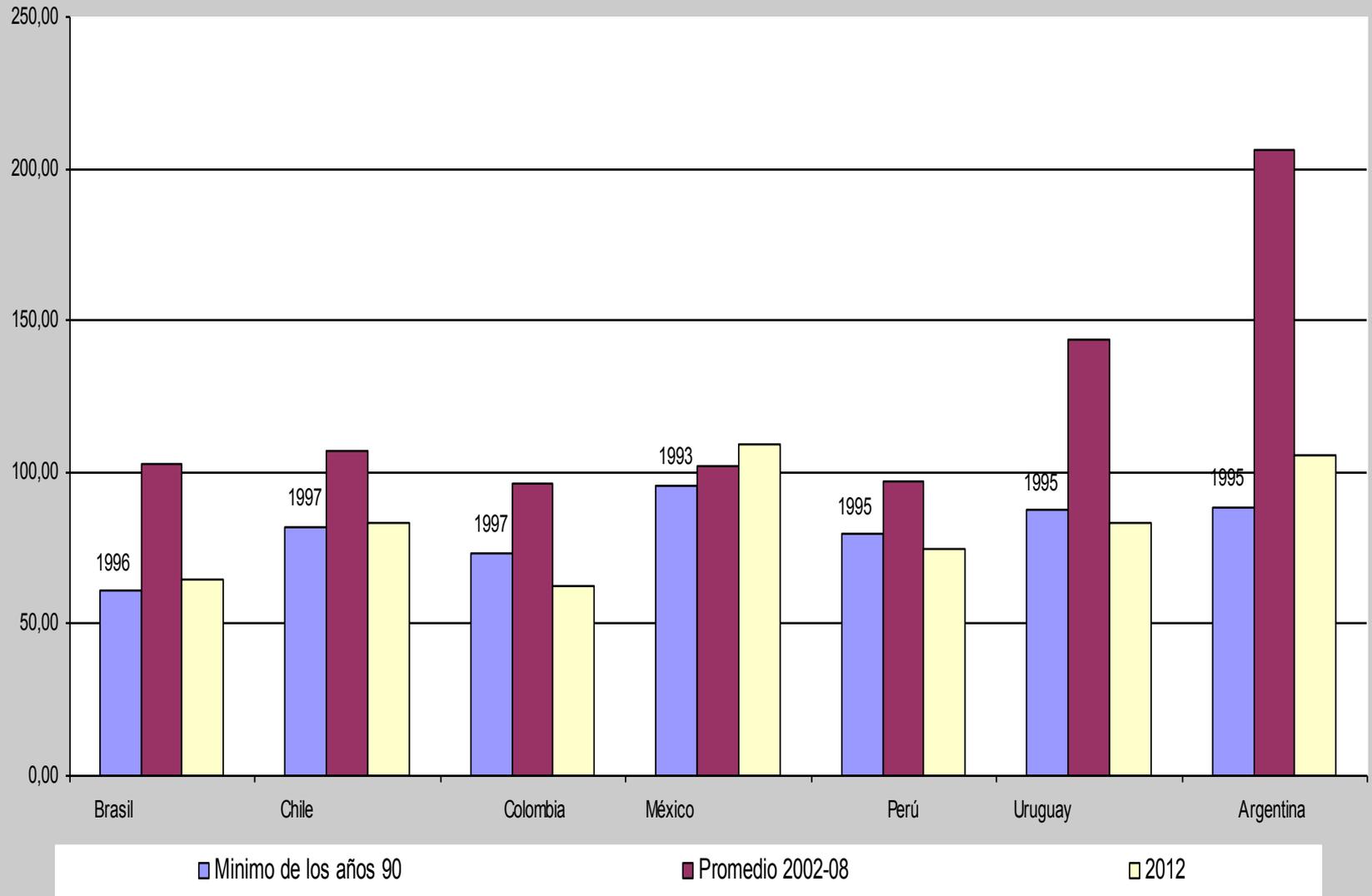
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Tipos de Cambio Relaes Bilaterales con Estados Unidos (100=2000)

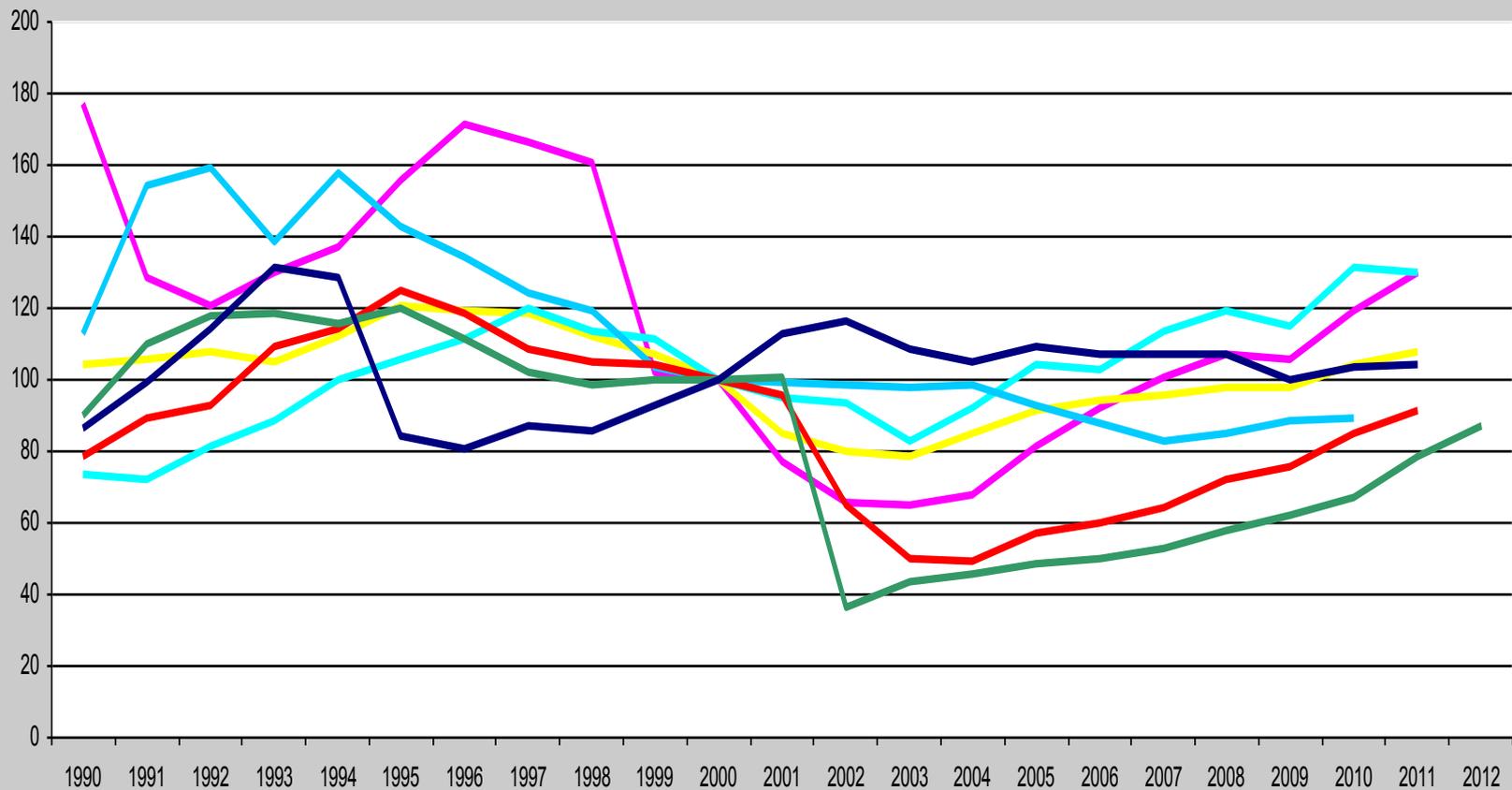


— Brasil
 — Chile
 — Colombia
 — México
 — Perú
 — Uruguay
 — Argentina

Tipos de Cambio Reales Bilaterales con Estado Unidos. Minimos de los años 90, promedios 2002-08 y 2012 (100=2000)



Costo Laboral Unitario en us\$ (clu\$) (100=2000)



- Brasil
- Chile
- Colombia
- Perú
- Uruguay
- Argentina
- México

Stability and sustainability of the CRER target

CRER

SCRER

SSCRER



The control of aggregate demand and inflation

A SSCRER has a permanent expansionary effect on aggregate demand. Monetary and fiscal policies must take into account that effect and must be consistently designed and implemented in order to attain the multiple real and inflation objectives.

Aggregate demand management rests on monetary and fiscal policies. In normal times, these policies have to largely play braking roles on the aggregate demand and inflationary pressures.

In the SSCRER regime the three macroeconomic policies are active and the coordination of macroeconomic policy is essential.

The braking role that monetary and fiscal policies should normally play in this context demands a sophisticated political leadership. The macro policies should be co-ordinately formulated, implemented and monitored at the government highest level



The exchange rate policy

Managed floating seems to be the best exchange rate arrangement to implement a SSCRER policy in present times.

The managed floating regime shows its best virtues when the central bank holds a sizeable amount of international reserves.

The advantages of the short run exchange rate floating should be preserved.

It seems advisable to avoid rules, announcements and commitments and deliver signals in implicit ways, throughout the central bank interventions. But it is important that the central bank and the government make clear the important role given to the SSCRER within the development strategy.

Expectations about the future exchange rate should be the main target of central bank interventions. Interventions should be bold, in order to clearly show to the market participants the willingness and strength of the monetary authority.

Monetary policy

Is monetary policy autonomous enough to influence aggregate demand in a SSCRER regime? Yes.

Usual objections to central bank interventions focus on the loss of monetary autonomy. This criticism is based on the “trilemma”: the central bank cannot simultaneously control the NER and the interest rate in a context of free capital movements.

The “trilemma” is false in some circumstances, and is thus false as a general characterization of open economies.

A condition for simultaneous control of the NER and monetary autonomy is the existence of an excess supply of FX at the NER and interest rate targeted by the central bank.

The monetary authority set the NER by purchasing the excess supply in the FX market and control the interest rate by sterilizing the monetary effects of this intervention.

The sustainability of sterilization policy I

Sterilized FX interventions to purchase foreign currency are possible at any point in time. But can this policy be applied continuously? Not in every circumstance. The sustainability of the policy depends on the interest rate earned by FX reserves, on the domestic interest rate, on the NER trend and on the evolution of the variables determining the supply of and demand for base money.

In Frenkel (2007 and 2008), we show that there is a maximum domestic interest rate below which the policy of sterilization is sustainable. Under conditions of excess supply of FX at the targeted NER, the central bank can set the NER and is free to set a domestic interest rate no higher than that maximum without generating unsustainable trends.

At any point in time, the unit cost of sterilization is

$$s = i - r - e$$

where s is the cost of sterilization, i the domestic interest rate, r the international interest rate and $e = dE/E$ ($E = \text{pesos} / \text{US\$}$) the rate of increase in the price of FX.

A policy of sterilization is obviously sustainable if s is nil or negative. If this were the sustainability condition, the policy of sterilization would be sustainable only if $i \leq r + e$

In Frenkel (2007), I show that this condition is not necessary for sustainability. The policy could be sustainable with domestic interest rates higher than $r + e$ and we calculate the maximum rate at which sterilization remains sustainable.

This conclusion is arrived at by simply considering the stock of central bank liabilities and taking into account the seigniorage received by the bank.

A simple model

$$P = B + L$$

where P is the total stock of central bank liabilities, B the outstanding monetary base and L the stock of interest-bearing liabilities.

At interest rate i and exchange rate E there is an excess supply of international currency C in the FX market, which the central bank purchases. R is the central bank's stock of international reserves (in international currency) and RE is the peso value of these reserves. The international reserves yield r , the international interest rate.

The sustainability condition is defined as $dP \leq d(RE)$

The condition means that the sterilization policy is sustainable if the ratio between total central bank liabilities and the domestic-currency value of international reserves $P/(RE)$ does not increase.

The sustainability condition is $i \leq (e + r) / IR$,

where $IR = L/RE$ is the quotient between the stock of interest-bearing central bank liabilities and the domestic-currency value of international reserves.

If $IR < 1$, the domestic interest rates required to preserve the sustainability of the sterilization policy can be greater than $e + r$, and the lower the IR quotient is, the higher they can be.

The sustainability on domestic and international interest rates, IR and also on the trajectory of the NER over time. The maximum domestic interest rate at which the sterilization policy remains sustainable is $i_{max} = (r + e) / IR$.

The sustainability of sterilization policy in the long run

The permanence condition of the degree of monetary autonomy can be expressed as another constraint on the domestic interest rate.

$$i \leq (e + r) + (B/L) \beta (p + y) - (C/R)(1 - IR) / IR$$

The constraint depends on the ratio between the monetary base and the stock of interest-bearing central bank liabilities and on the rate of growth in the demand for base money. The constraint also depends negatively on the ratio between the flow of central bank purchases in the FX market and the stock of reserves (equivalent to the rate of international reserves growth, net of interest).

Capital controls help preserve whatever degree of autonomy is possessed by the economy at a given time. In the same way, if there is a fiscal surplus, the government can invest part of that surplus in external assets, thereby reducing the amounts the central bank needs to purchase to keep the exchange rate on target.

Conclusions on sterilization policy sustainability and monetary autonomy

In summary, the conclusions we arrived are as follows. If the conditions

$i \leq (e + r) / IR$ and also $i \leq (e + r) + (B/L) \beta (p + y) - (C/R)(1 - IR) / IR$ are met, the policy of sterilization is sustainable and the degree of autonomy is permanent.

Conversely, if $(e + r) + (B/L) \beta (p + y) - (C/R) (1 - IR) / IR < i \leq (e + r) / IR$, the sterilization policy is sustainable but the degree of autonomy tends to diminish.

Exchange rate policy in a SSCRER regime does not usually inhibit the exercise of monetary policy. The orthodox criticism is not valid.



The conclusion does not imply that in a SSCRER regime the control of aggregate dynamics and inflation pressures can exclusively rest on the monetary policy.

The sustainability constraints could combine with a low interest rate elasticity of the aggregate demand to impair the regulatory capacity of monetary policy. The level of the interest rate capable of influencing the aggregate demand dynamics could be higher than the maximum sustainable interest rate.

Active monetary policy can and should be practised because all available instruments should be used to control the pace of aggregate demand and inflationary pressures. But the responsibility could not rest primarily or exclusively on monetary policy. This observation highlights the crucial role that fiscal policy has to play in a SSCRER regime.

The SSCRER Macroeconomic Policy Regime

- i) A managed floating regime, combining exchange rate flexibility with discretionary interventions by the central bank in the foreign exchange (FX) market.**
- ii) A competitive level trend in the real exchange rate (RER), avoiding strong appreciations in the short run.**
- iii) A surplus trend in the current account of the balance of payments and moderate current account deficits in the short run.**
- iv) The accumulation of sizeable international reserves.**
- v) An active monetary policy, facilitated by the sterilization of the interventions in the FX market and the inexistence of fiscal dominance. It should be implemented in coordination with short run fiscal policy. Capital controls might be necessary to simultaneously attain ii) and v) (i.e., to preserve monetary autonomy).**
- vi) An equilibrium trend in the fiscal accounts and moderate fiscal deficits in the short run.**