## THE IMPACT OF THE INTERNATIONAL FINANCIAL CRISIS UPON EMERGING ECONOMIES AND THE PERFORMANCE OF DISCRETIONARY FISCAL POLICIES: THE CASE OF ARGENTINA

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# STRUCTURE OF THE PRESENTATION

- **1-** INTRODUCTION.
- 2- DISCRETIONARY FISCAL POLICIES IN THE LITERATURE.
- **3-** STYLIZED FACTS.
- 4- MEASUREMENT OF DISCRETIONARY FISCAL ACTIONS AND BUILT-IN FLEXIBILITY. METHODOLOGY AND ANALYSIS OF RESULTS .
   5- CONCLUSIONS .

# INTRODUCTION

Recent international crises (2007-2008) did not hit Latin American countries with the intensity of in previous recessions given that better macroeconomic fundamentals isolated them from turbulences.

The impact was however felt via the external sector, as dwindled international demand for emerging countries' manufactured exports depressed the activity level of their industrial sectors and reduced in turn governments' tax revenues.

In this context, the debate was re-started on whether developed and emerging countries should only rely on economic stabilizers or if the latter's poor performance called for discretionary fiscal policies to be resorted to checking cyclical perturbations.

Argentina was a particular case in the Region, as notwithstanding some negative effects from the U.S. and the European crises, its major economic problems in the last years stemmed from the uncertainty brought about by confusing domestic policies and misleading government actions.

# **OBJECTIVES**

To analyze the actual impact of 2007 and 2008 international crises upon the activity level of Argentine domestic economic sectors and to assess whether likely negative effects, operating through tax revenue reductions, worsened the federal government's fiscal sustainability.

To analyze the performance of the primary fiscal surplus in order to determine whether fiscal losses can be explained by the working of automatic stabilizers or if they directly responded to the fall in the activity level, in the latter case for reasons other than the effect of international crises but related to domestic economic policies.

To assess where there has actually been discretionary fiscal actions in Argentina, in the period 2006-2009 and, if so, how they fared with respect to expected policy goals and whether fiscal policy had been conditioned by lags, opportunity and dosage of measures.

# DISCRETIONARY FISCAL POLICIES IN THE LITERATURE

- •Friedman, M. (1948), "A Monetary and Fiscal Framework for Economic Stability".
- •Musgrave, R. A. and M. H. Miller (1948), "Built-in Flexibility".
- •Johansen, L. (1971), "Public Economics".
- •Blanchard, O. and R. Perotti (1999), "An empirical characterization of the dynamic effects of changes in government spending and taxes on output".
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- •Cohen, D. and G. Follete (2000), "The Automatic Fiscal Stabilizers: Quietly Doing their Thing".
- •Taylor, J.B. (2000), "Reassessing Discretionary Fiscal Policy".

# DISCRETIONARY FISCAL POLICIES IN THE LITERATURE

•Auerbach, A.A. and Feenberg (2000), "The significance of Federal Taxes as Automatic Stabilizers".

•Auerbach, A. A. (2002), "Is there a role for discretionary fiscal policy?.

•Auerbach, A. A. (2009), "Implementing the New Fiscal Policy Activism".

•Feldstein, M. (2009), "Rethinking the Role of Fiscal Policy".

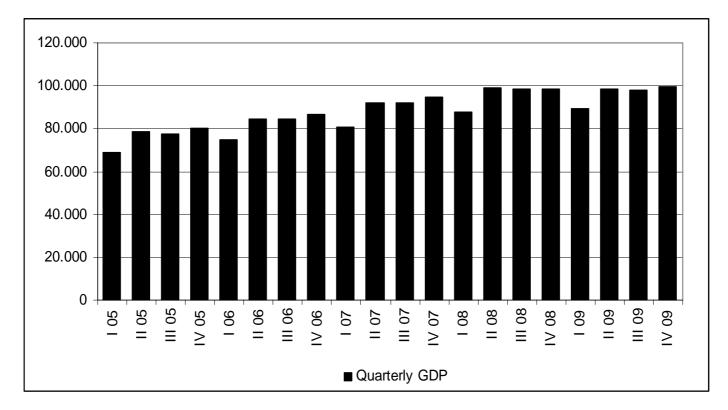
•Taylor, J.B. (2009), "The Lack of an Empirical Rationale for a Revival of Discretionary Fiscal Policy".

•Spilimbergo, A., Symansky, S., Blanchard. O and C. Cottarelli (2008), "Fiscal Policy for the Crisis".

•International Monetary Fund (2009), "The States of Public Finances: Outlook and medium term policies after the 2008 crisis". 6

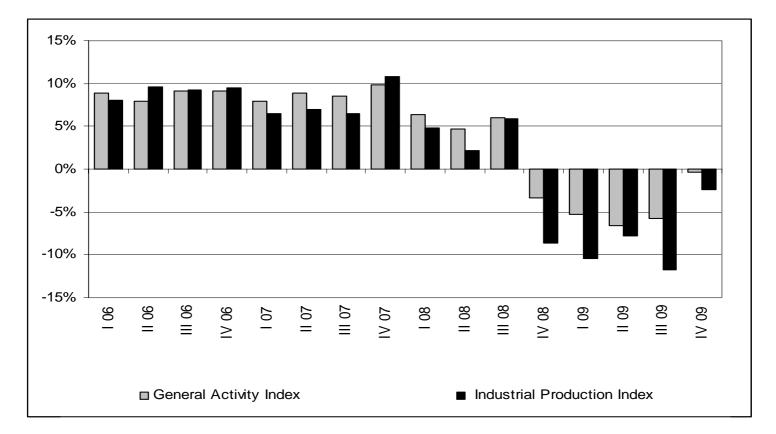
# STYLIZED FACTS

<u>Argentina - Quarterly Evolution of Gross Domestic Product</u> (Seasonally adjusted and in million of pesos of 1993)



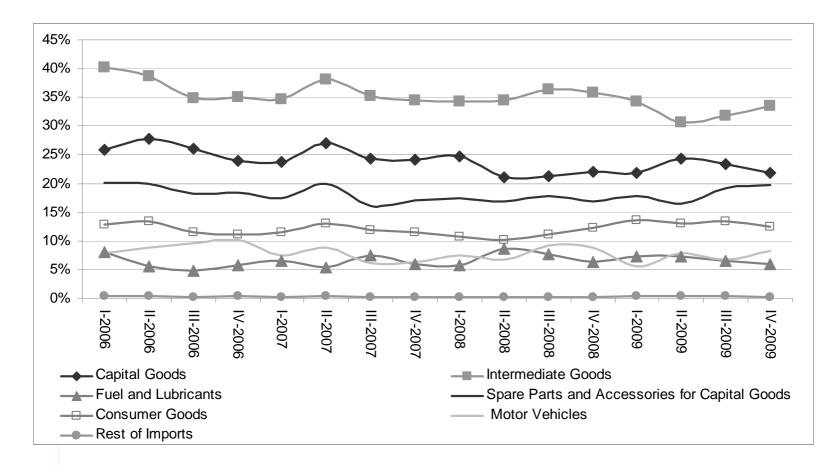
Source: Own estimates on the basis of data from the Secretary of Economic Policy, Argentina.

## <u>Argentina – Inter Annual Rates of Change of the General Activity and</u> Industrial Production Indexes



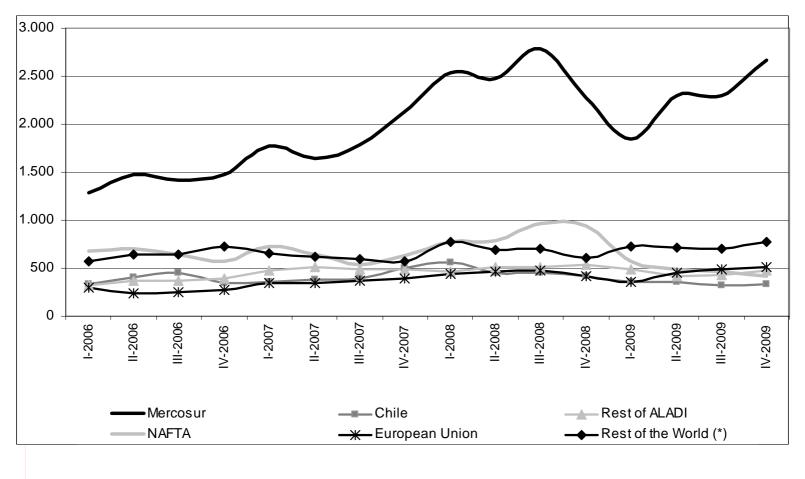
Source: Orlando J. Ferreres y Asociados, Database, Buenos Aires, Argentina.

## <u>Argentina - Quarterly evolution of import's components</u> (in percents of total imports)



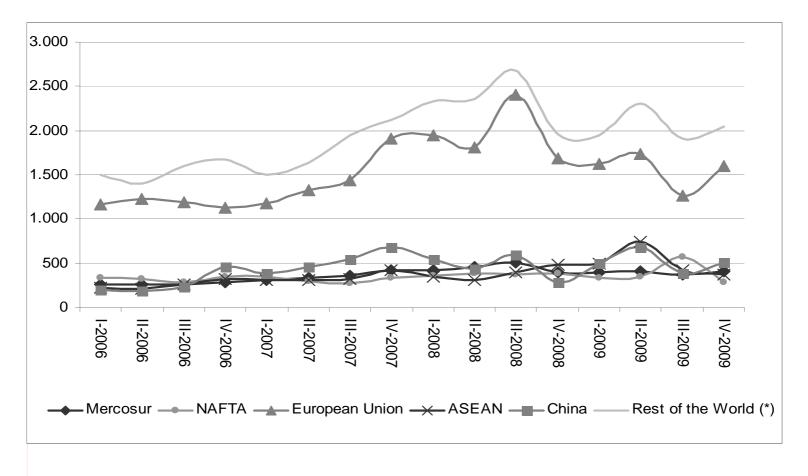
Source: National Institute of Statistics and Censuses (INDEC), Argentina

## <u>Argentina - Quarterly Evolution of Industrial Goods Exports</u> (in million of current dollars)



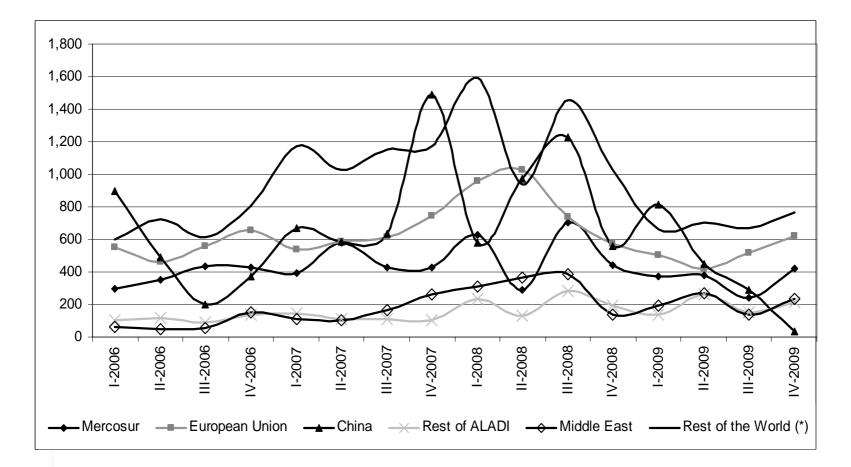
Source: National Institute of Statistics and Censuses (INDEC), Argentina

## <u>Argentina - Quarterly Evolution of Agro Industrial Goods Exports</u> (in million of current dollars)



Source: National Institute of Statistics and Censuses (INDEC), Argentina

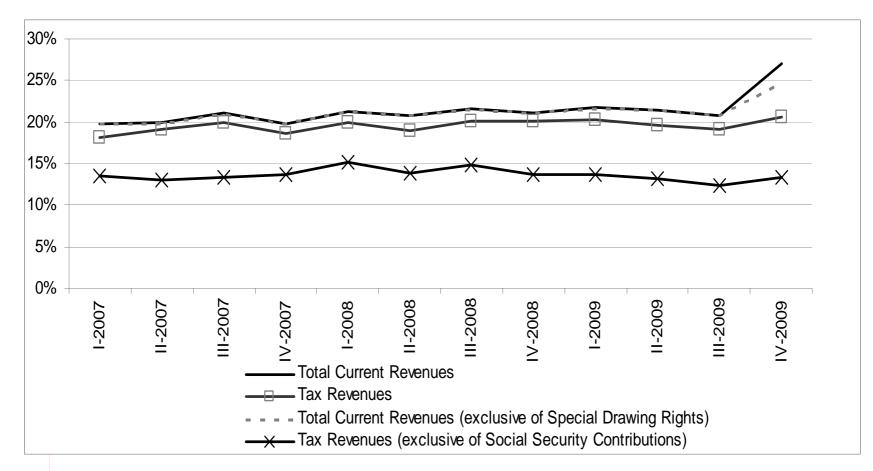
## <u>Argentina - Quarterly Evolution of Agricultural Commodities Exports</u> (in million of current dollars)



Source: National Institute of Statistics and Censuses (INDEC), Argentina

# Argentina - Quarterly Evolution of Federal Public Revenues

(Seasonally adjusted variables in percent of GDP)

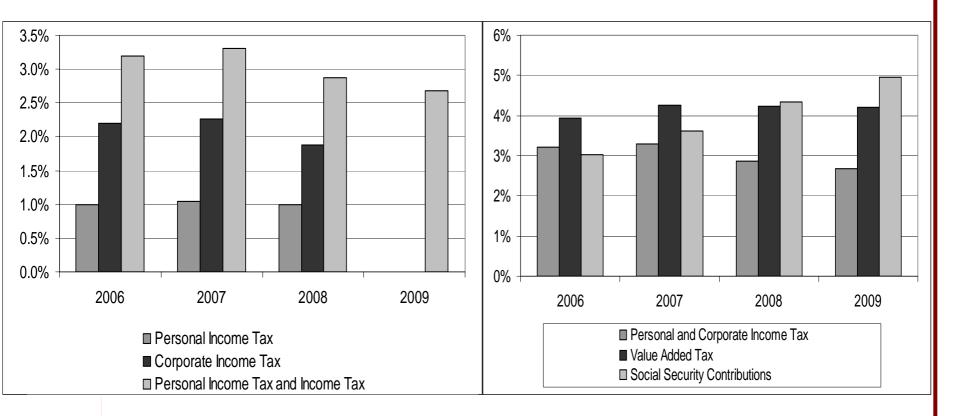


<u>Source</u>: Data from Secretary of Economic Policy and National Bureau of Investigation and Fiscal Analysis, Argentina.

## Evolution of Individual and Corporation Income Tax

(Variables in percent of GDP)

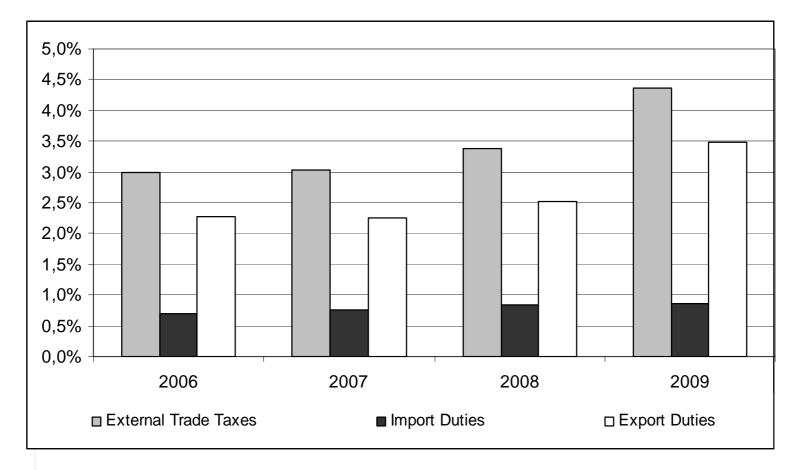
Evolution of Income Tax, Value Added Tax and Social Security Contributions (Variables in percent of GDP)



Source: Data from Secretary of Economic Policy and National Bureau of Investigation and Fiscal Analysis, Argentina.

# Argentina - Evolution of External Trade Taxes

(Variables in percent of GDP)

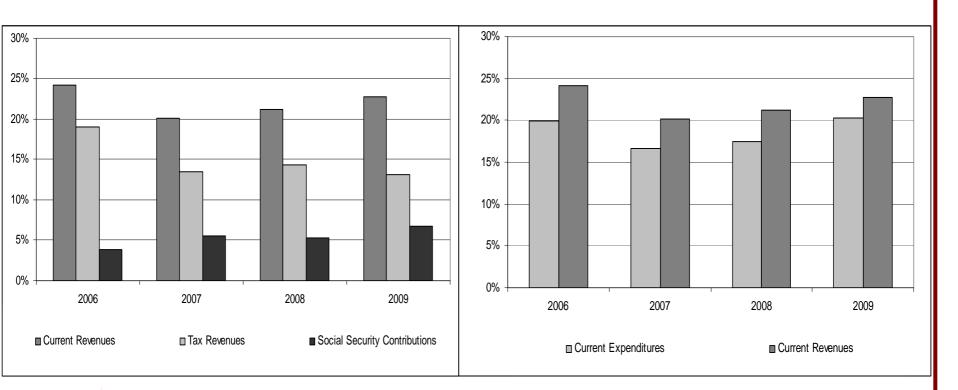


Source: Data from Secretary of Economic Policy and National Bureau of Investigation and Fiscal Analysis, Argentina.

#### IEF

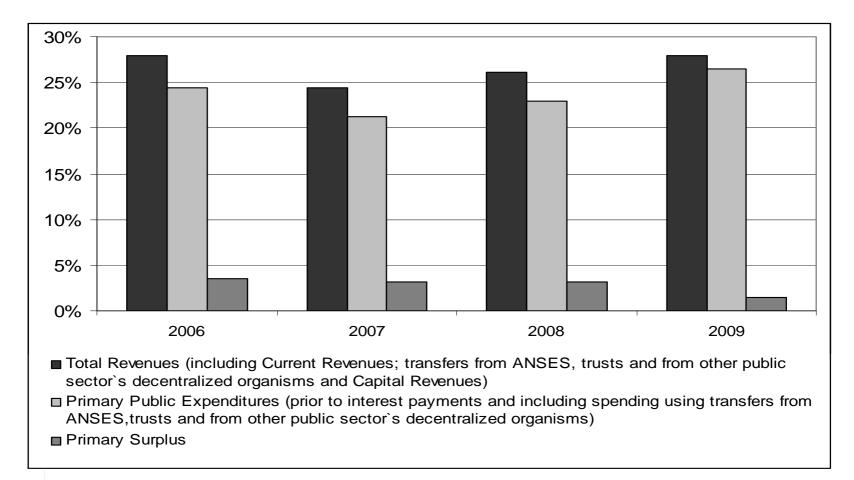
#### Federal Government's Current Revenues (in percents of GDP)

Federal Government's Current Revenues and Expenditures (in percents of GDP)



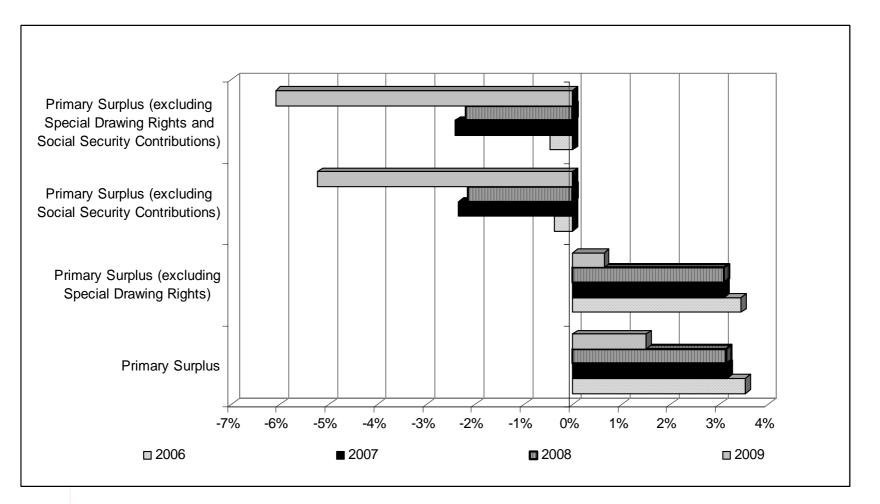
Source: Data from Secretary of Economic Policy and National Bureau of Investigation and Fiscal Analysis, Argentina.

# Federal Government's Total Revenues, Primary Expenditures and Surplus (in percents of GDP)



Source: Data from Secretary of Economic Policy and National Bureau of Investigation and Fiscal Analysis, Argentina.

## Argentina - Annual evolution of Primary Surplus (Variables in percent of GDP)



Source: Data from Secretary of Economic Policy and National Bureau of Investigation and Fiscal Analysis, Argentina.

# **Fiscal Policy in Argentina**

# Measure of discretionary fiscal actions and built-in flexibility.

The **budget outcome** can be considered as the aggregate of the following two elements:

1. An economic environment induced component, associated to the concept of <u>"cyclical deficit"</u>, or <u>"cyclically neutral deficit"</u>, leaving aside other variables` effect.

**2.** A <u>discretionary component</u> reflecting policy makers` decisions upon revenues and expenditures policies. Under the previous assumption, this "structural deficit" will exist if the economy follows its long run growth path, for what its behaviour depends on the policy operation and not on the current economic circumstances.

# MEASURE OF DISCRETIONARY FISCAL ACTIONS

The IMF's index of Fiscal Policy orientation, or **Cyclical Effect of Budget (CEB)**, yields a measure of fiscal discretionary actions, respect of a benchmark year and is defined as:

$$CEB_{t} = (G_{t} - T_{t}) - (g_{t-1}YP_{t} - t_{t-1}Y_{t}) \quad (1)$$

$$Where_{t_{t-1}} = \frac{T_{t-1}}{Y_{t-1}} \quad \text{and} \quad g_{t-1} = \frac{G_{t-1}}{YP_{t-1}}$$

 $T_t y T_{t-1}$  are total public revenues for year t and 0, respectively;  $G_t y G_{t-1}$  are total public expenditures for year t and 0, respectively;  $Y_t y Y_{t-1}$  stand for the observed products in year t and the benchmark year, respectively;

 $YP_t y YP_{t-1}$  stand for the potential products in year t and the benchmark year, respectively

The cyclically neutral budget profile, or "Neutral Cyclical Balance" (NCB), equals to:

$$NCB = g YP - t Y$$
(2)

 $(G_t-T_t)>NCB$ ; CEB>0  $\longrightarrow$  The fiscal action will be expansive  $(G_t-T_t)<NCB$ ; CEB<0  $\longrightarrow$  The fiscal action will be contractive

One objective is to assess the inter annual effect of fiscal policy actions upon the government's budgetary outcome. Therefore, for ruling out a possible dependence of the index from particular characteristics of benchmark year (the previous one in this case), CEB and NCB are defined in relation to each year's observed nominal GDP.

# Argentina: Evolution of the Budget Balance

(In percent of GDP)

	2006	2007	2008	2009
Total Revenues (*)	27,98%	24,46%	26,12%	27,93%
Primary Public Expenditures (**)	24,44%	21,29%	22,97%	26,42%
Primary Surplus	3,54%	3,17%	3,15%	1,51%
Cyclical Component	3,21%	3,39%	3,069%	3,067%
Cyclically Adjusted Primary Surplus	0,33%	-0,22%	0,08%	-1,55%
Interest payments	1,76%	2,03%	1,73%	2,14%
Budget Balance	1,78%	1,14%	1,42%	-0,62%

<u>Source</u>: Own estimates on the basis of data from Secretary of Economic Policy, the National Bureau of Investigation and Fiscal Analysis and Economic Commission for Latin America and the Caribbean.

(\*) Total Revenues (including current revenues; transfers from ANSES, trusts and from other public sector's decentralized organisms and capital revenues).

(\*\*) Primary Public Expenditures (prior to interest payments and including spending using transfers from ANSES, trusts and from other public sector's decentralized organisms).

# **ARGENTINA: 2009'S DISCRETIONARY FISCAL ACTIONS**

	Absolut Increment	Absolut Increment in percent of GDP
Current Transfers	14,803.8	1.29%
-Transfers to Universities	2,474.8	0.22%
-Budgetary Transfers to Aerolineas Argentinas	1,235.4	0.11%
-Transfers to External Sector	24.1	0.00%
Net Current Transfers	11,093.6	0.97%
Capital Transfers	6,451.9	0.56%
Total Transfers	17,545.5	1.53%

Source: Data from Budget National Bureau, Argentina.

# ARGENTINA: 2009'S DISCRETIONARY FISCAL ACTIONS CURRENT TRANSFERS

	Absolut Increment	Absolut Increment in percent of GDP
Transferencia y Asistencia Financiera a Empresas y Fondos Fiduciarios	3,031.6	0.265%
Acciones de Empleo y Gasto Público Social	2,799.0	0.245%
Asignaciones Familiares	2,279.5	0.199%
Asistencia financiera a provincias	2,008.4	0.176%
Resto	1,301.9	0.114%
Transferencias al INSSJyP y SIPA	971.6	0.085%
Transferencias para el financiemiento de las Cajas Provinciales Previsionales	683.0	0.060%
Subsidios y Atención a sectores productivos	-1,981.4	-0.173%
Total Transferencias Corrientes	11,093.6	0.970%

Source: Data from Budget National Bureau, Argentina.

## ARGENTINA: 2009'S DISCRETIONARY FISCAL ACTIONS CAPITALTRANSFERS

	Incrementos absolutos	Incrementos absolutos en porcentaje del PIB
Gasto público social	3,154.1	0.276%
Inversión en infraestructura	2,712.3	0.237%
Resto	298.3	0.026%
Equipamiento e infraestructura	258.3	0.023%
Transferencias y asistencia financiera a empresas y fondos fiduciarios	28.9	0.003%
Total Transferencias de Capital	6,451.9	0.564%

<u>Source</u>: Data from Budget National Bureau, Argentina.

# **BUILT-IN FLEXIBILITY**

Musgrave and Miller (1948) provided a very simple form of measuring the performance of automatic stabilizers in a macrostatic framework, in which the degree of effectiveness of built-in flexibility was made a function of the marginal propensity to consume, the average tax rate and the sensitiveness of the chosen tax combination to changes in income.

$$\alpha = \frac{bE_T r}{1 - b + bE_T r + j}$$

Where

*b* stands for the marginal propensity to consume;

*j* is the marginal propensity to import;

r stands for the average tax rate;

 $E_t$  is the elasticity of the chosen fiscal combination respect to income changes.

 $\alpha = 1$  all cyclical fluctuations are corrected

$$\alpha = 0$$
 built-in flexibility does not exist

# Argentina: Evolution of income elasticity of the tax yield

	2006	2007	2008	2009
Tax Revenues	1.22	1.37	1.28	1.22
Tax Revenues (exclusive of Social Security Contributions)	1.08	1.25	1.21	0.47
Personal and Corporate Income Tax	0.94	1.14	0.93	0.33
Value Added Tax	1.37	1.43	1.01	0.91
Social Security Contributions	2.10	2.06	1.65	4.46

## Argentina: Evolution of the average rates of the tax yield

	2006	2007	2008	2009
Tax Revenues	0.22	0.23	0.25	0.26
Tax Revenues (exclusive of Social Security Contributions)	0.19	0.19	0.20	0.21
Personal and Corporate Income Tax	0.05	0.05	0.05	0.05
Value Added Tax	0.06	0.07	0.07	0.07
Social Security Contributions	0.03	0.04	0.04	0.05

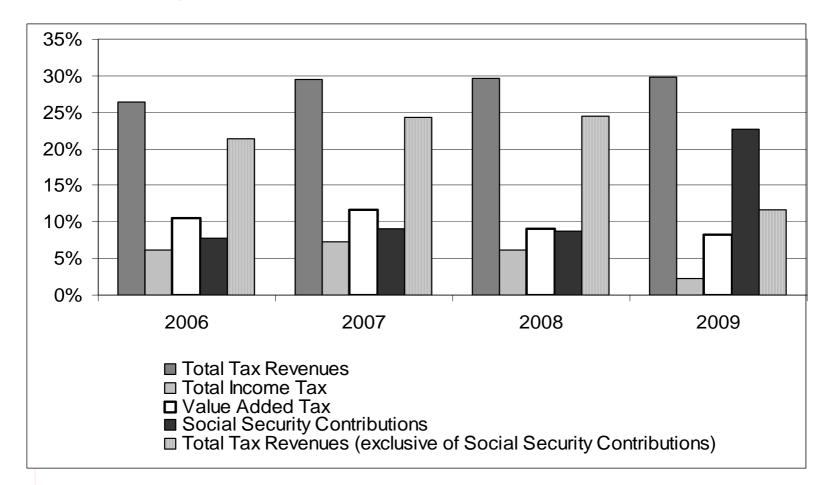
<u>Source</u>: Own estimations on the basis of data from the Secretary of Economic Policy and the National Bureau of Investigation and Fiscal Analysis, Argentina.

# Argentina: Built-in flexibility of the tax system

	2006	2007	2008	2009
Total Tax Revenues	26%	30%	30%	30%
Total Tax Revenues (exclusive of Social Security Contributions)	21%	24%	25%	12%
Total Income Tax	6%	7%	6%	2%
Value Added Tax (VAT)	11%	12%	9%	8%
Social Security Contributions	8%	9%	9%	23%
Total Income Tax, Social Security Contributions and VAT	15%	17%	15%	22%
Value Added Tax and Social Security Contributions	8%	10%	9%	16%
Total Income Tax and Social Security Contributions	5%	6%	6%	11%

<u>Source</u>: Own estimations on the basis of data from the Secretary of Economic Policy and the National Bureau of Investigation and Fiscal Analysis, Argentina.

# Argentina: Built-in flexibility of the tax system



<u>Source</u>: Own estimations on the basis of data from the Secretary of Economic Policy and the National Bureau of Investigation and Fiscal Analysis, Argentina.

•The present fiscal weakness of the Argentine federal government is not derived from international unfavourable conditions but rather results from domestic economic policies that, apart from substantially increasing public expenditures, added uncertainty to the decision making process of economic agents.

•A growing state intervention in markets, increased ambiguity respect of property rights (elimination of fully funded private pension funds), seizing of public utilities, export bans and increase of export duties explain, as of 2008, the sluggish investment performance, the decline in the index of industrial level, the reduction in firms` profitability and the stagnation of corporate income tax yields.

•The negative impact of the international crises was in this opportunity slightly felt due to better macroeconomic fundamentals and it only affected domestic exports of industrial goods. However, this could be sorted out in reason of the country's membership to MERCOSUR: losses from NAFTA –as of 2007- and European countries' imports in 2008 were compensated by increased exports to Brazil.

•Agro industrial goods and agricultural commodities` exports fell in 2008-2009 due to export bans and supply-discouraging tax rate increases. Also, negative effects of the international crises were visible with respect to China (one of Argentina's single most important customers), although the federal government managed to keep exports duties growing by raising tax rates.

The yield of most important taxes (Income Tax and VAT) stagnated, although total revenues (in terms of GDP) positively evolved as a result of transfers of funds and contributions from the eliminated Private Pension Fund System and of IMF's special draw rights received in 2009.

In spite of that, primary surplus kept steadily decreasing from 2007 through 2009 due to the government's commitment to continue with the freezing of tariffs of electricity, gas, transport and combustible, which turned into an ever increasing flow of budgetary subsidies towards utilities and transport firms.

The Primary Surplus structural weakness is more obvious when non ordinary revenues (such as the exceptional Special Drawing Rights received from the IMF and the transfer to treasury of private pension fund assets are excluded.

•Two spending programmes, aimed at enhancing social contention by curbing extreme poverty, were implemented in 2009 : Argentina works and Children's Universal Grant and a limited amount of infrastructure investment funds were granted to provincial and local governments. Thus, the assumedly government's discretionary fiscal response to adverse world conditions amounted to 1.55% of GDP and was only limited to the spending side of the budget.

•Primary Public Spending (in terms of GDP) fell 12.9% in 2007 and it increased 7.9% in 2008, due to the mentioned impact of budgetary subsidies chanelled to of public service firms and utilities. In 2009, Primary Public Spending (in terms of GDP) underwent an increase of 15% as, apart from subsidies, the treasury had to finance the implementation of the above mentioned programmes.

•The Primary Surplus shrank 10.6% and 0.5% in 2007 and 2008 respectively. However, the discretionary fiscal policy was still slightly contractive in the period (0.08% in terms of GDP). In 2009, the Primary Surplus suffered a dramatic reduction of 52% compared to 2008. At the same time, and owing to a substantial increase of 23.4% in interest payments, the Financial Budget Surplus showed a marked reduction in 2009. 32

•The stabilizing power of the Income Tax and VAT declined in the last two years, due to the effect of new discretionary tax spending but also, in the case of Income Tax, to the preeminence of corporate income tax upon individual income tax that diminished the level of progressivity.

•The degree of built-in flexibility in Argentina, estimated on the basis of the total tax yield, has stabilized around 30% in the last three years. This modest performance avails the idea that automatic stabilizers do not suffice to check by themselves cyclical perturbations.

•When tax revenues (exclusive of Social Security Contributions) were considered, the degree of built-in flexibility showed a strong decline in 2009 (12%) compared to Social Security Contributions were included. Needless to emphasize, the discretionary increase of transfers from the eliminated Private Pension Fund System contributed to increase income elasticity in 2009 and to soften the business cycle.