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Argentina's Economic Outlook

Unstable scenarios ahead

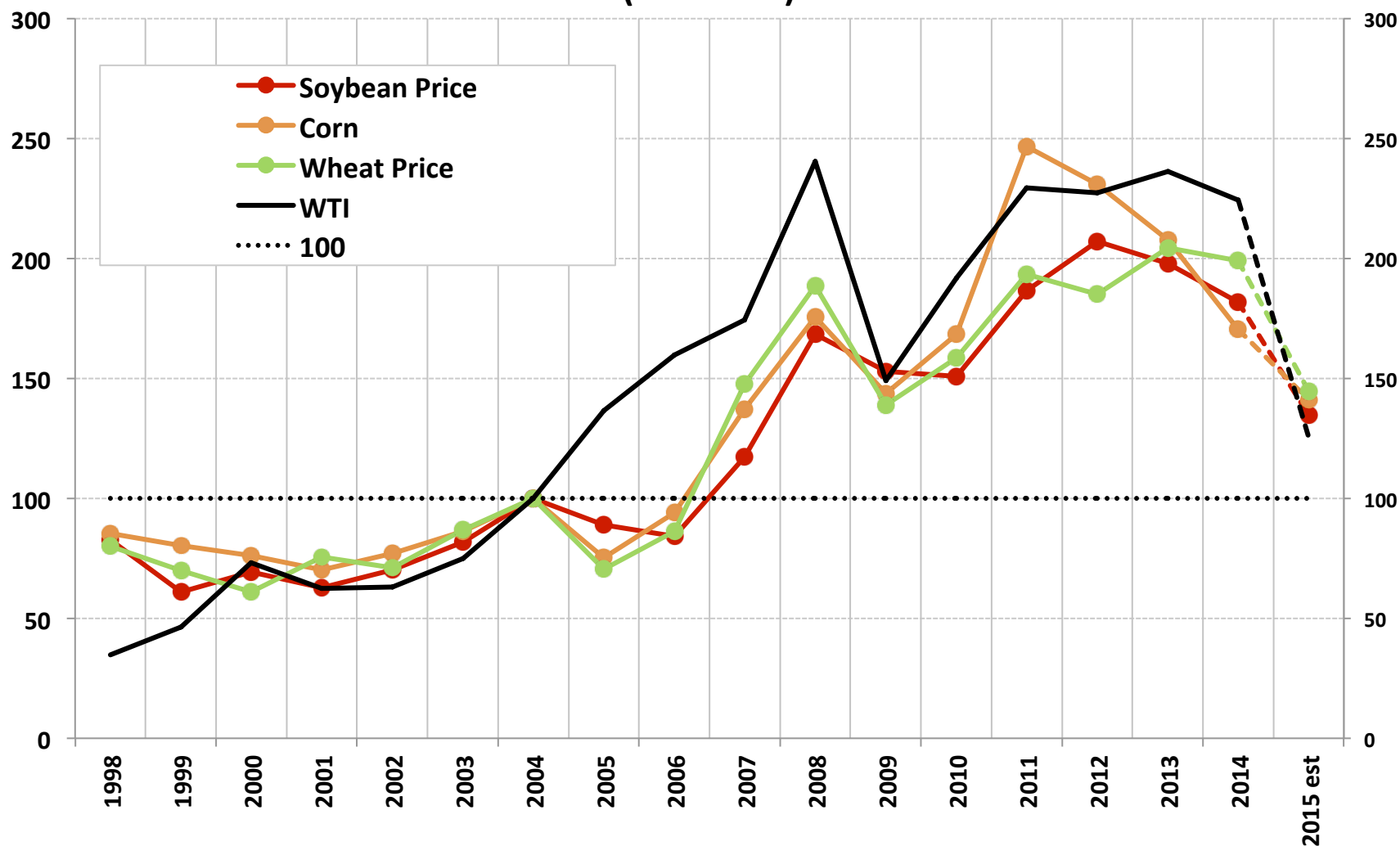
Juan Luis Bour

Council of the Americas

New York, April 23rd, 2015

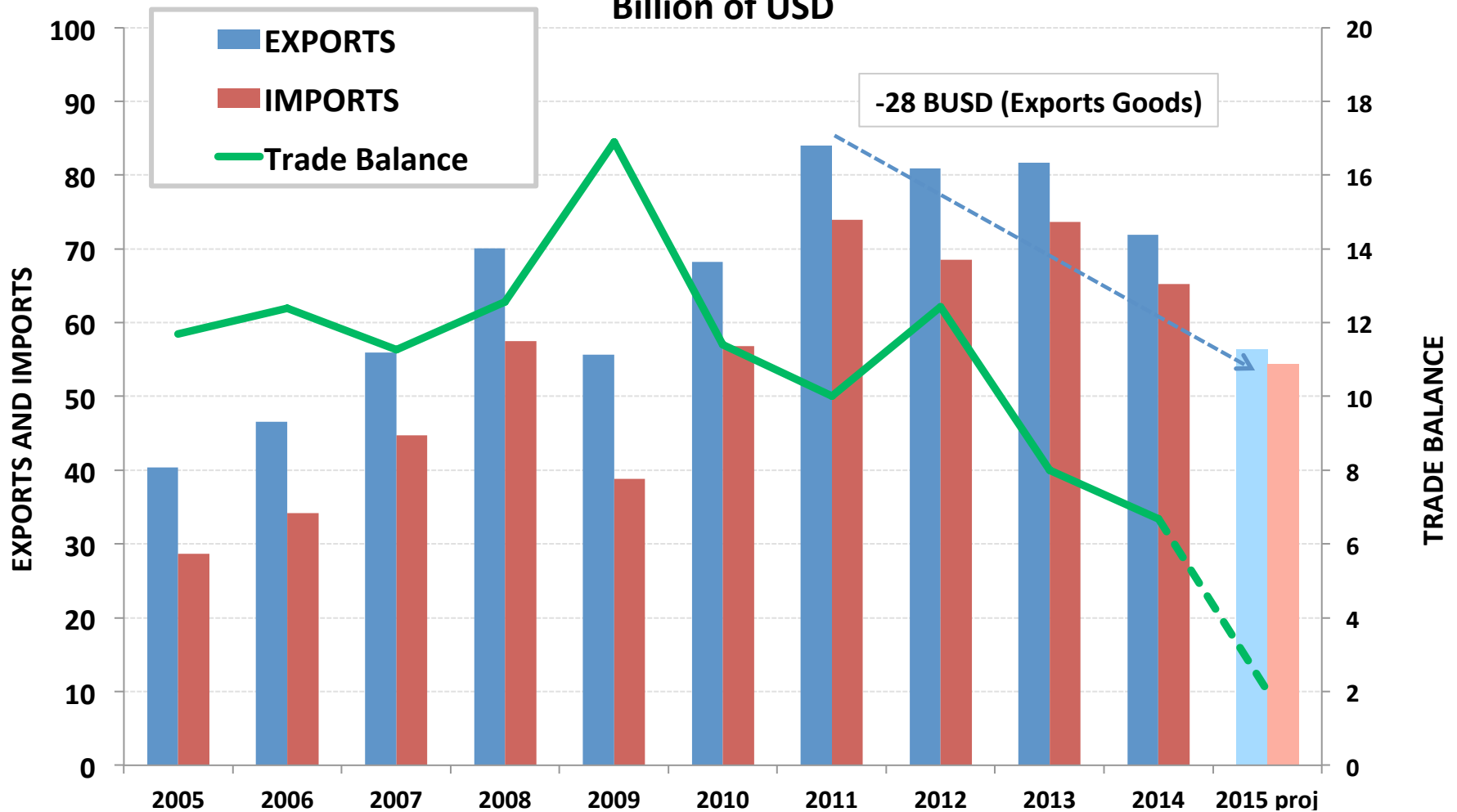
*Head winds from Brazil and low commodity prices
(with impact on trade and manufacturing production)*

**SOYBEAN, CORN, WHEAT and Oil Prices (current USD)
(2004:100)**



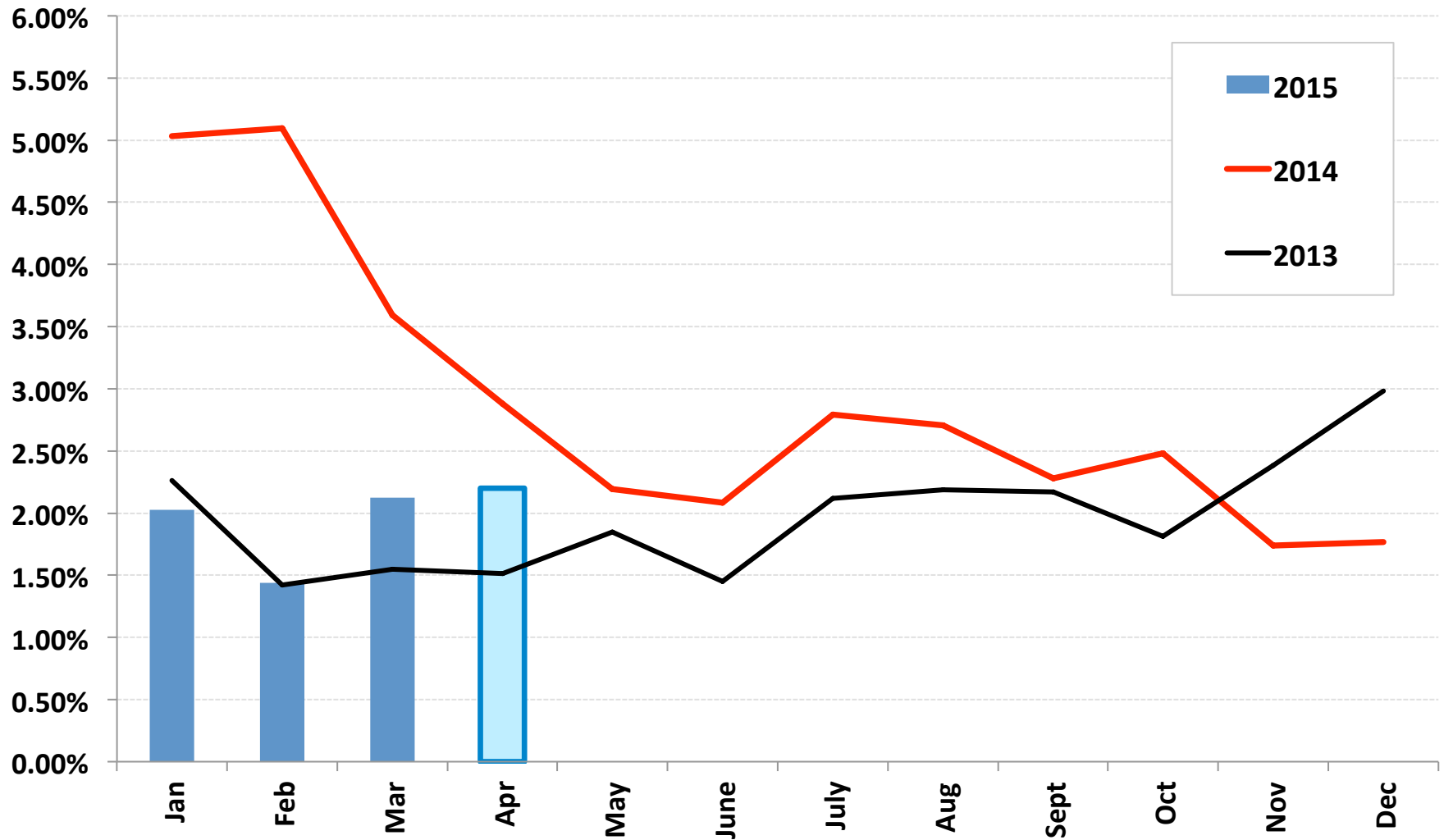
*Exports (value) down 28 BUSD in 4 years
(33% in value, 21% in volume)*

Exports, Imports and Trade Balance Billion of USD

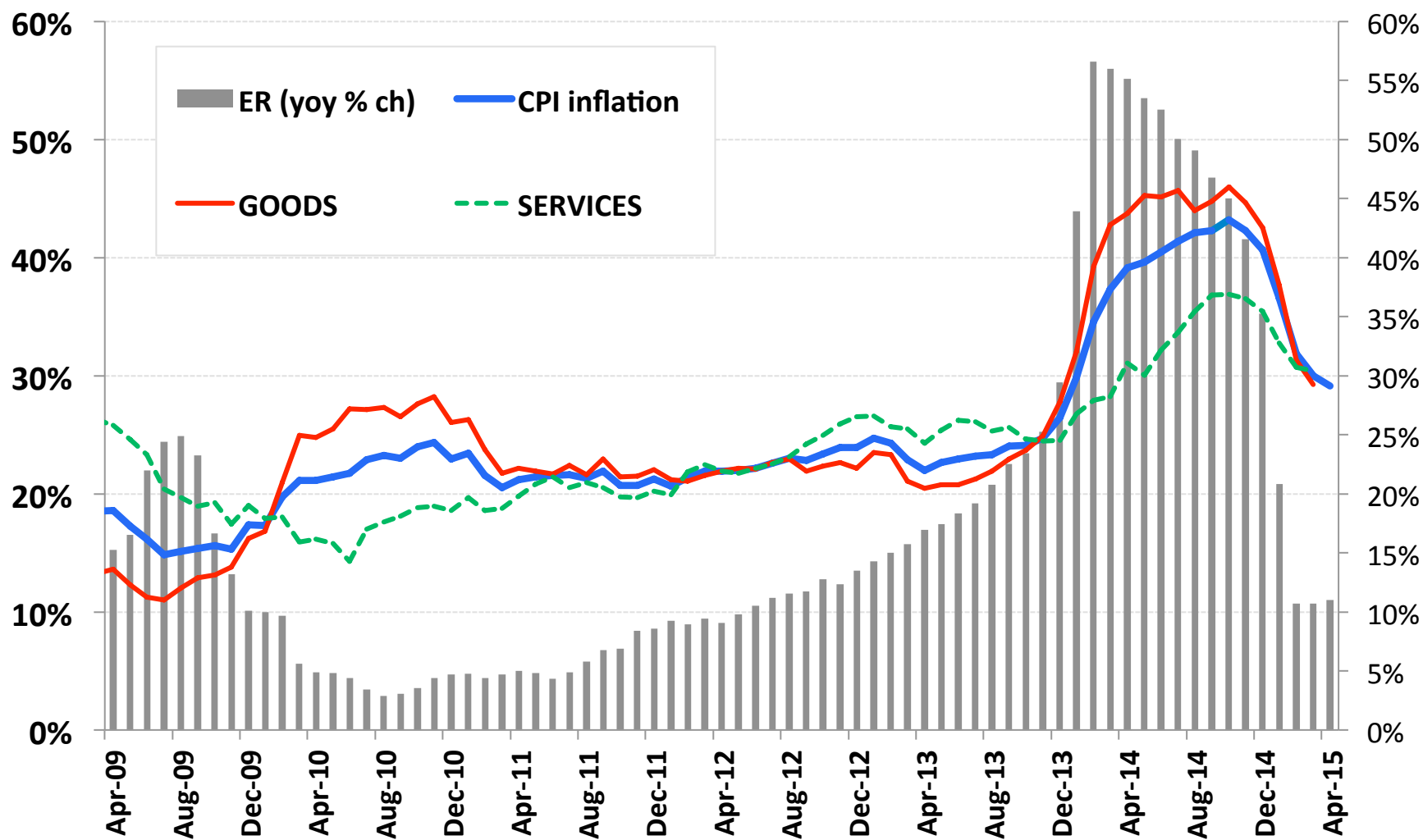


*Inflation: in spite of strong repression (tariffs, regulated prices and ER)
monthly inflation crawling above 2% (= deceleration is over)*

Monthly inflation 2013/2015



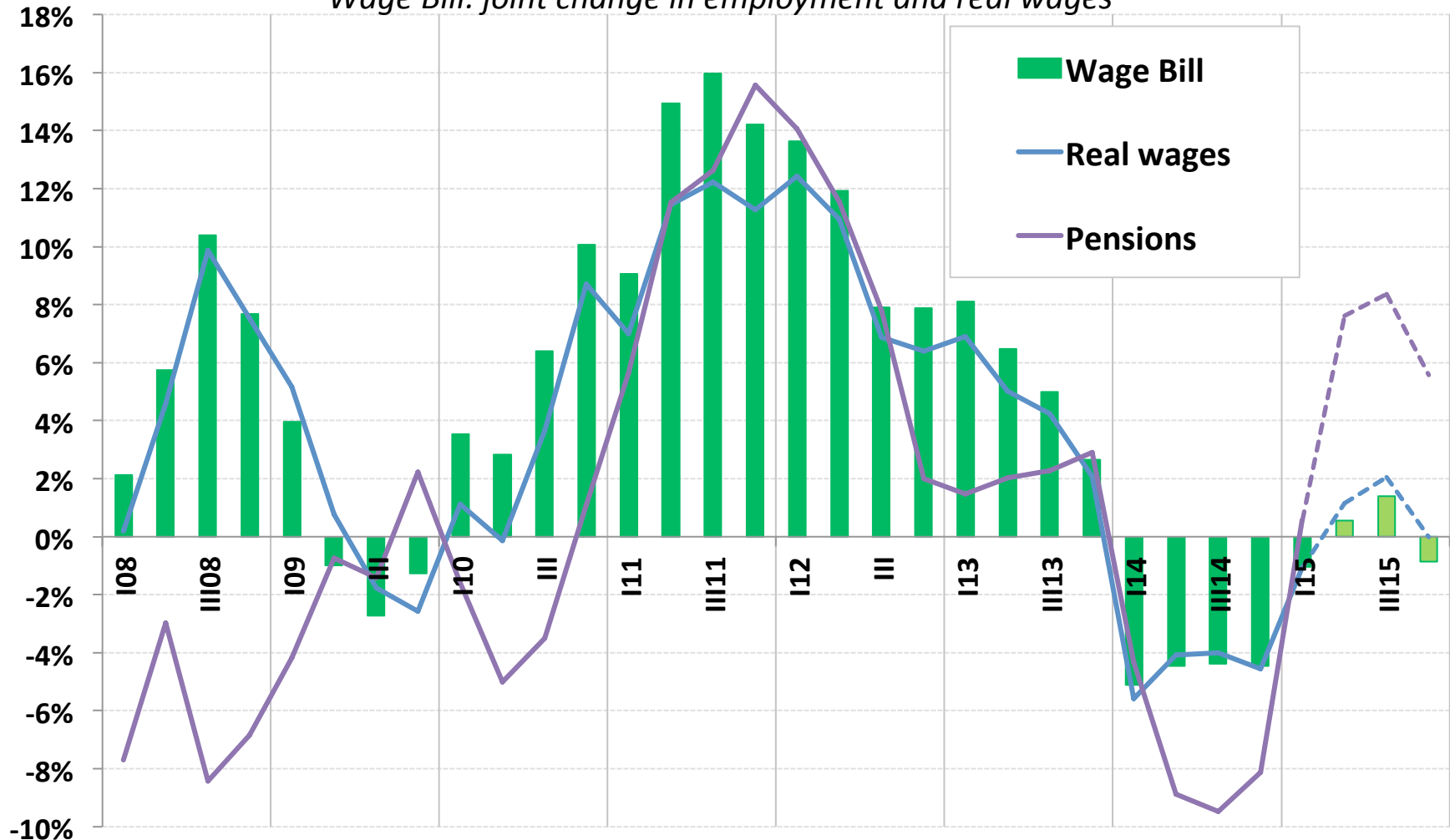
INFLATION (FIEL-CPI) and ER devaluation



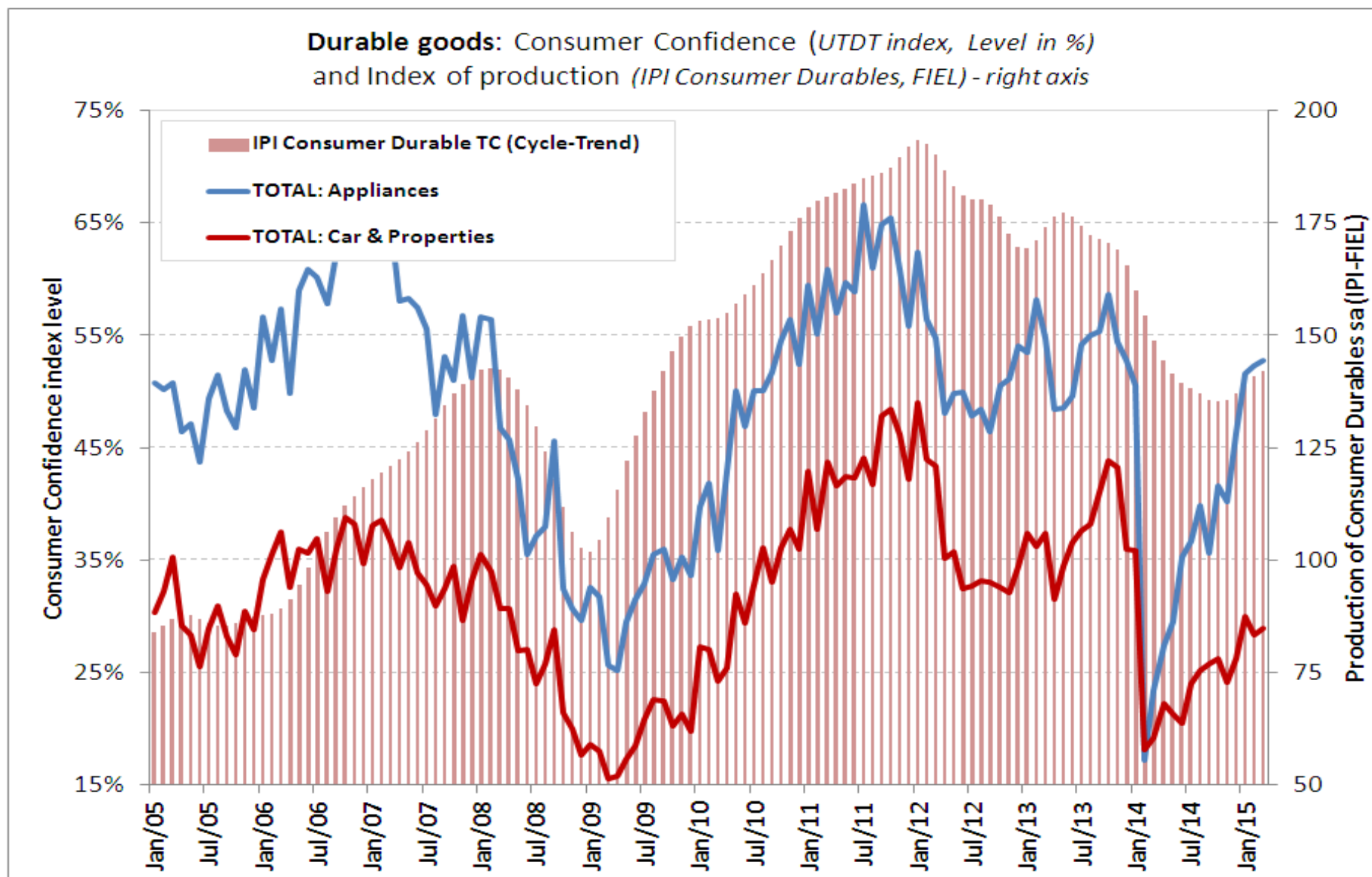
Expected recovery in real incomes in Q2 & Q3
(lagged dynamic of wages and pensions) – But Q4 looks different (inflation up)

Real Wages, Wage Bill and Pensions

Wage Bill: joint change in employment and real wages

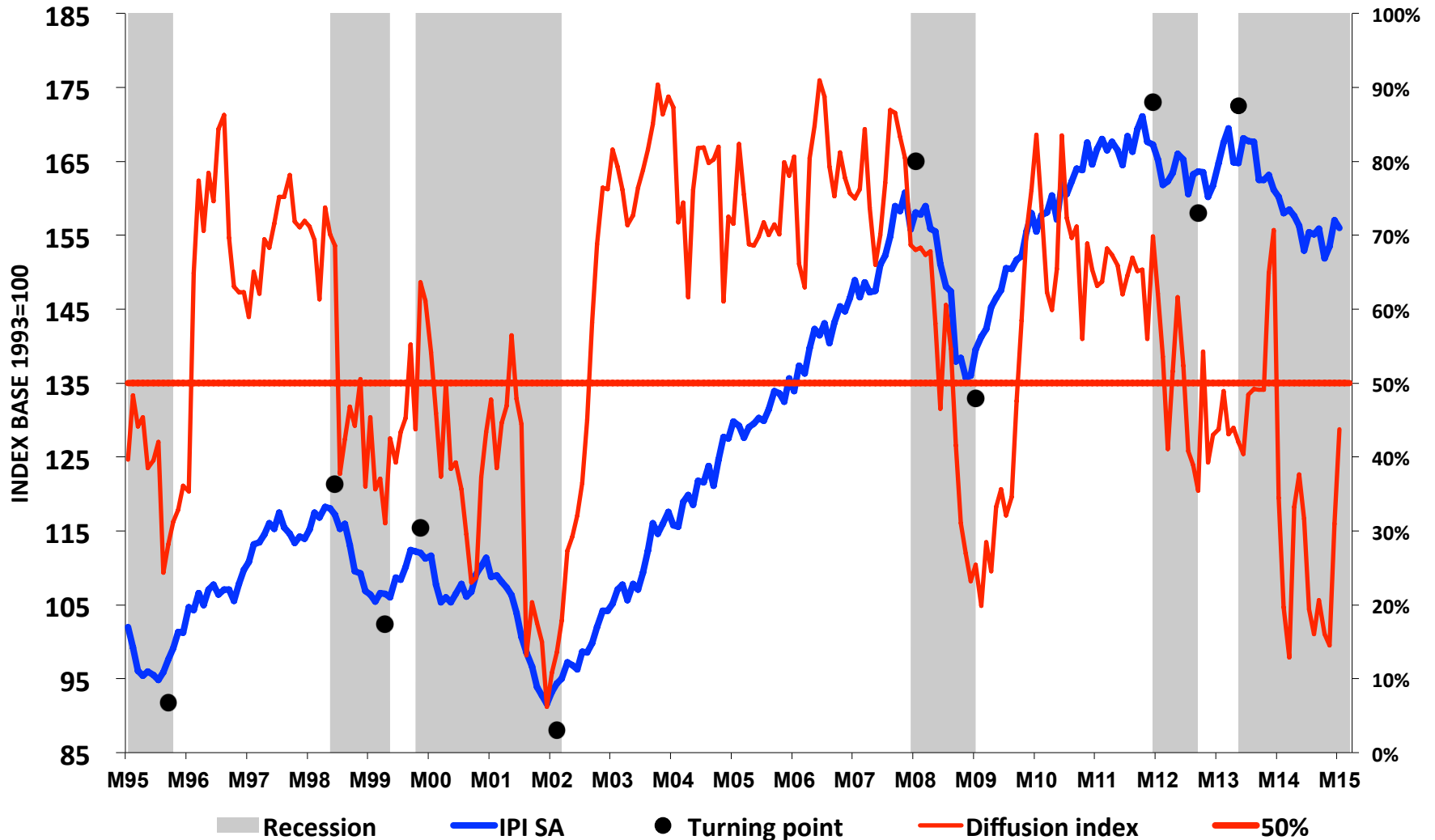


*Consumer confidence is rebounding
(just for small appliances – strong credit subsidy and change in real incomes)*



Manufacturing: close to a turning point (for how long?)

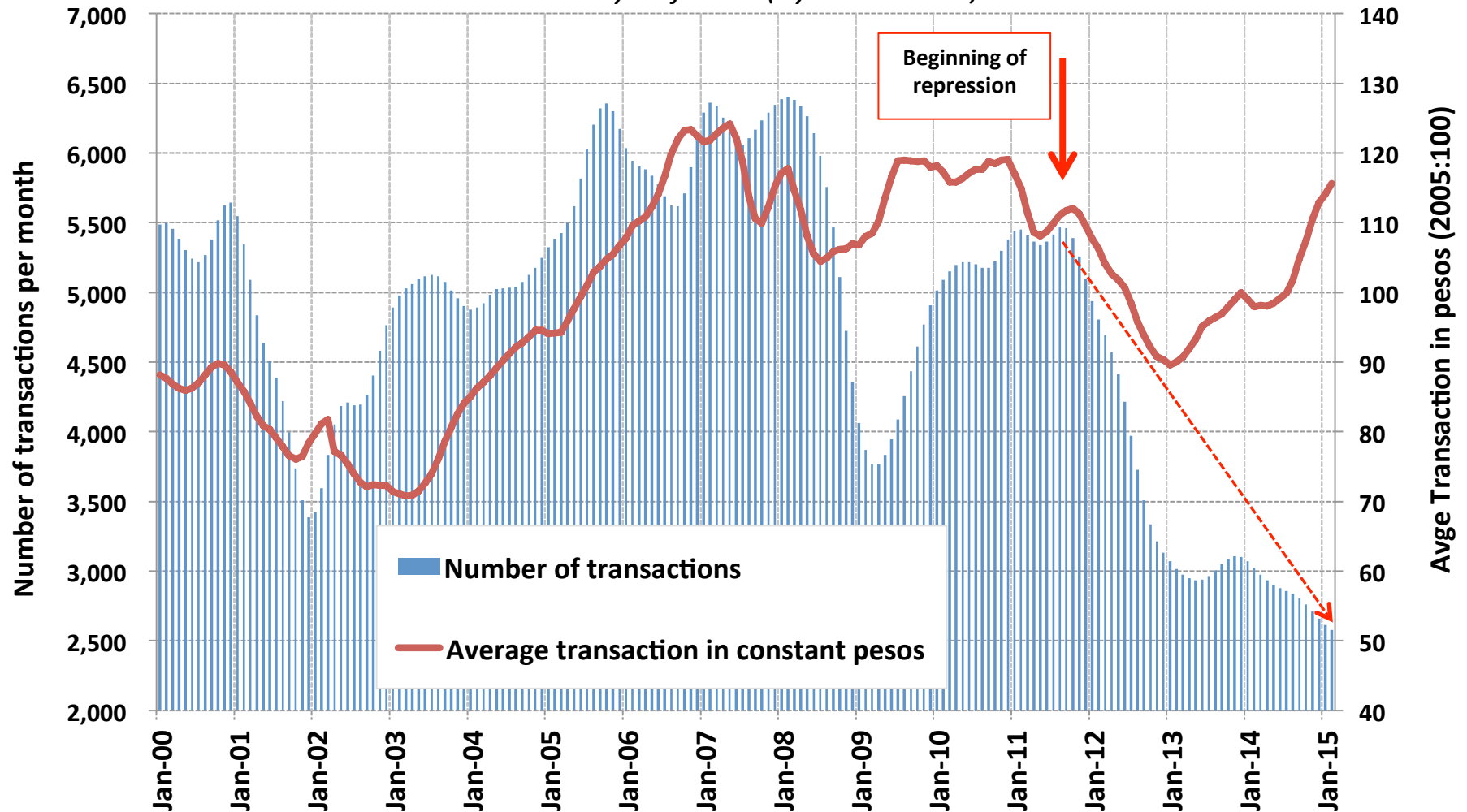
**The business cycle : FIEL IPI manufacturing index
seasonally adjusted and Diffusion index**



*Deepening recession in real estate: transactions down 55%
(since generalization of repression in real estate and financial markets)*

**City of BA - Real estate transactions (left) and
average transaction in constant pesos (right)**

Seasonally adjusted (Cyclical Trend)



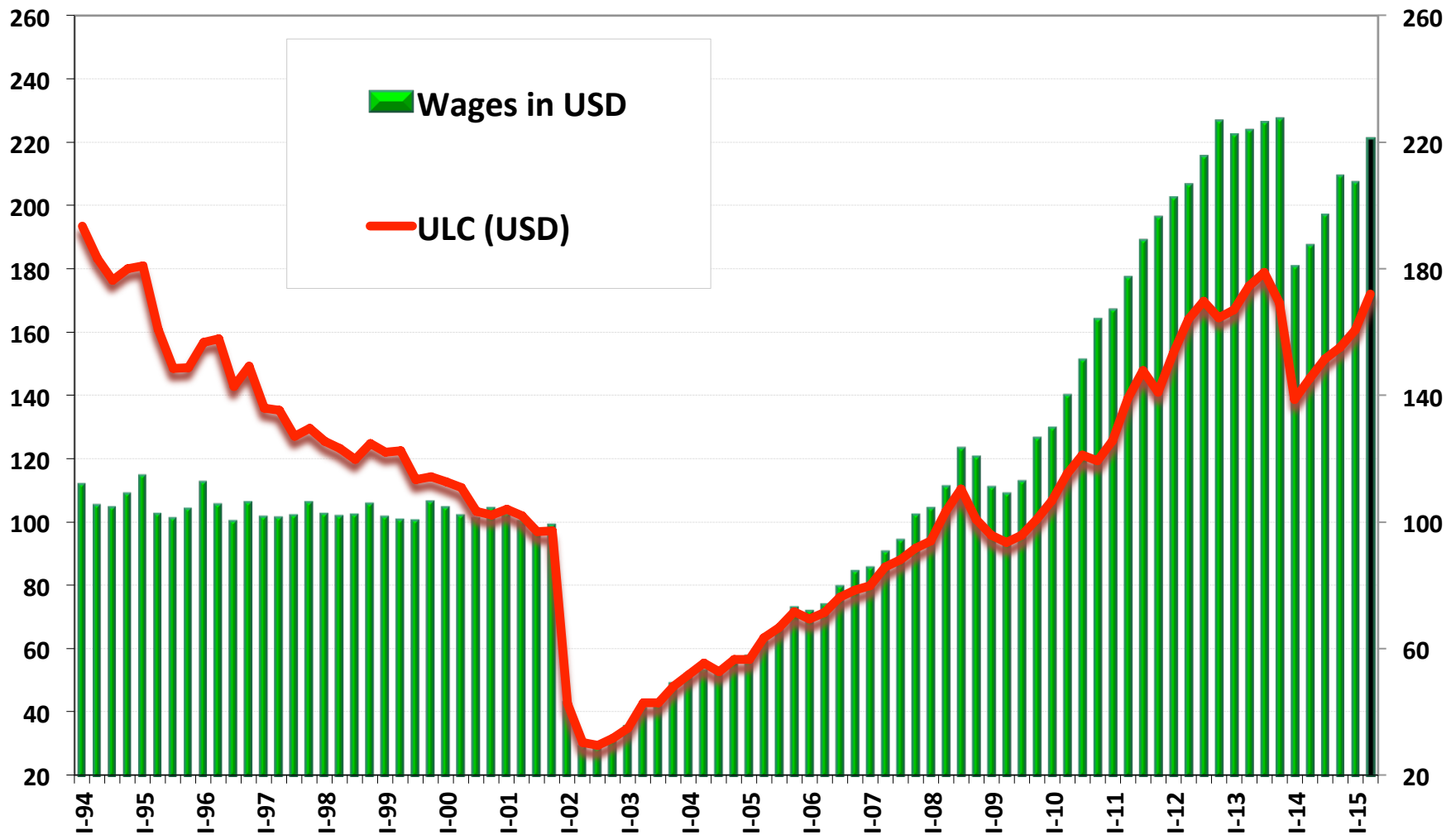
Overstaffing: Employment growth (totally) driven by the public sector

Changes in private and public employment

| Year | Private employment | | Public Employment | |
|------|--------------------|-----------------------------------|--------------------|-----------------------------------|
| | <i>level (eop)</i> | <i>Yoy % change (average)</i> | <i>level (eop)</i> | <i>Yoy % change (average)</i> |
| 1990 | 100.0 | | 100.0 | |
| 2000 | 124.5 | 2.2% | 94.3 | -0.6% |
| 2010 | 147.7 | 1.7% | 127.6 | 3.1% |
| 2015 | 147.6 | 0.0% | 156.7 | 4.2% |

The dual of ER appreciation: Unit Labor Costs follow an explosive path

Wages (Manufacturing INDEC) & Unit Labor Costs (Output: EMI)
Current USD - 2001:100



Macro outlook: short term

| Variable | Unit | 2004-07 K1 | 2008-11 K2 | 2012-15 K3 | 2015 |
|--|--------------------------|---------------|---------------|---------------|------------|
| GDP growth | <i>average, Yoy % ch</i> | 8.83 | 4.04 | -0.10 | -1.3 |
| Investment/GDP | <i>average</i> | 20.4 | 22.5 | 20.4 | 18.8 |
| Exports (Goods, USD) Yoy % change | <i>average, Yoy % ch</i> | 17.0 | 12.5 | -9.1 | -22.0 |
| Imports (Goods, USD) YoY% change | <i>average, Yoy % ch</i> | 35.0 | 18.2 | -7.0 | -18.0 |
| Inflation | <i>average</i> | 10.5 | 20.6 | 29.0 | 30 |
| Real ER (2001:1.0) | <i>average</i> | 2.06 | 1.54 | 1.21 | 1.08 |
| Wages (Private Formal) in USD | <i>average</i> | 470 | 876 | 1406 | 1494 |
| <i>Wages (Private Formal) Blue USD</i> | <i>average</i> | <i>470</i> | <i>862</i> | <i>965</i> | <i>999</i> |
| Reserves (gross) | <i>average</i> | 27725 | 48625 | 34490 | 20400 |
| Current account | <i>average</i> | 2.4 | 0.9 | -1.0 | -2.0 |
| Fiscal balance (% of GDP) | <i>average</i> | 1.3 | -1.4 | -4.9 | -7.0 |
| Loans Private Sector/GDP | <i>eop</i> | 8.3% | 10.3% | 12.9% | 12.8% |

SOURCE: FIEL



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Argentina's Economic Outlook

Frankenstein's undoing: Energy Subsidies

Fernando Navajas

Council of the Americas

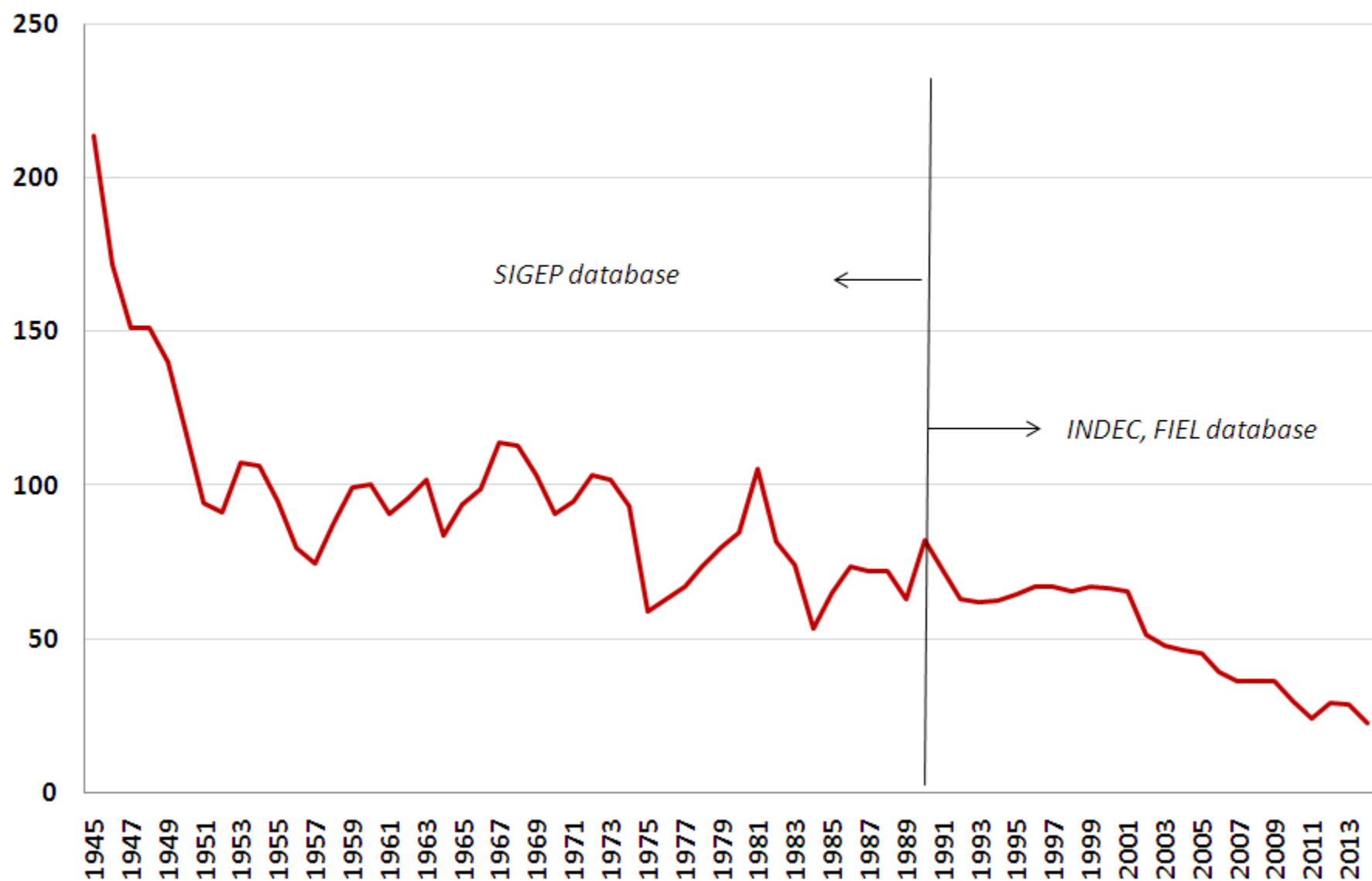
New York, April 23rd, 2015

Introducing Frankenstein

- After the largest induced drop (in recorded history) of prices of natural gas and electricity, subsidies soared with large fiscal and external impacts
 - The “nuts” argument was that this would spur growth. It did exactly the opposite.
- Supplying both sectors “costed ” in 2014 about 10 billion dollars each, with demand “paying” only 4 billion in natural gas and 2 billion in electricity. This added up to more than 3% of GDP.
 - About 50% of this goes to households and 70% of this (i.e. 35%) goes to non-poor families.
- But costs of supply are expressed in dollars , while demand prices are in pesos. A 30% real devaluation adds about 5 billion dollars to the previous figure.
 - Lower import prices (net of higher domestic prices to producers) in 2015 help a bit but do not change this landscape.
- Purposed legacy: Removing subsidies will be costly in terms of incidence, price stability and political costs in the short run.

Argentina: Real electricity prices for households 1945-2014

(1960=100)



10 Episodes of downfalls in real electricity prices for households 1945-2015

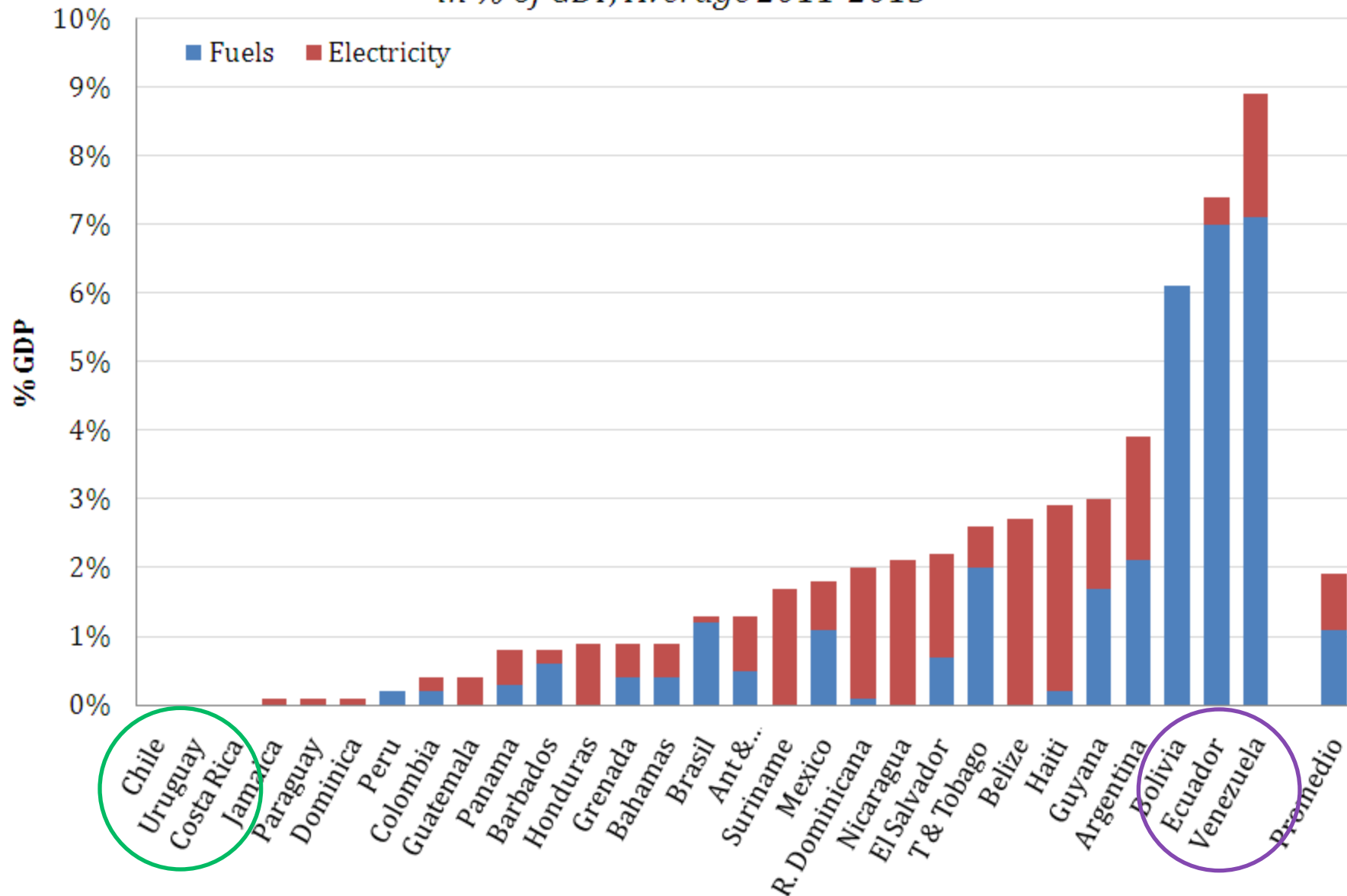
Residential customers prices deflated by the CPI

| Period | Years duration | Size of Drop | Adjustment in 1st year of reversal | Correction of drop in 1st year of reversal |
|---------|----------------|--------------|------------------------------------|--|
| 1945-52 | 7 | 51.3% | 17.4% | 16.5% |
| 1953-57 | 4 | 30.7% | 18.1% | 40.9% |
| 1960-61 | 1 | 9.2% | 5.4% | 53.3% |
| 1963-64 | 1 | 18.1% | 12.3% | 55.7% |
| 1967-70 | 3 | 20.2% | 4.4% | 17.4% |
| 1973-75 | 2 | 42.6% | 6.4% | 8.6% |
| 1981-84 | 3 | 49.2% | 21.8% | 22.5% |
| 1986-89 | 3 | 14.1% | 30.0% | 182.8% |
| 1990-94 | 4 | 23.7% | 2.7% | 8.7% |
| 2001-15 | 14 | 73.0% | ? | ? |

Source: Navajas (2015)

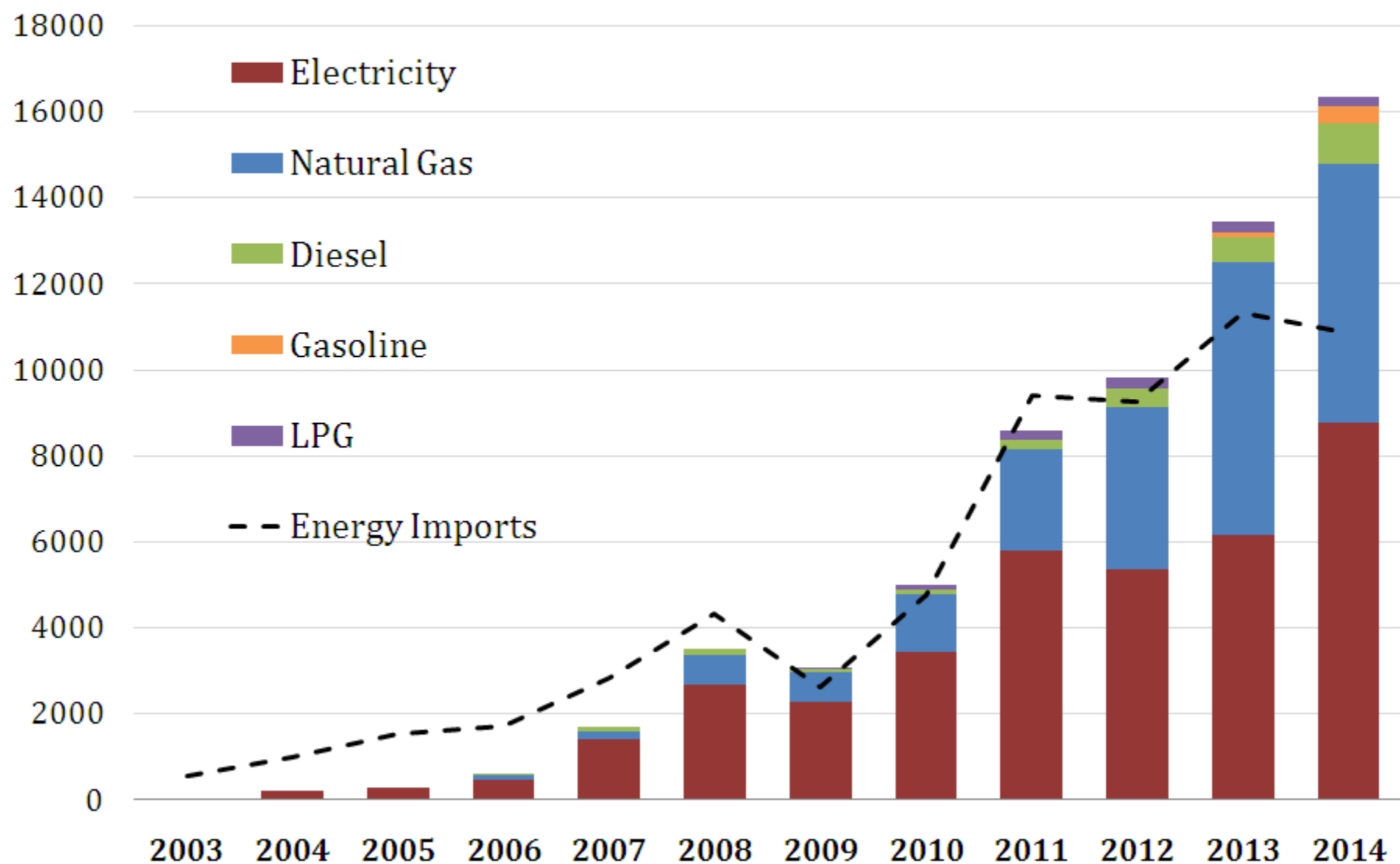
Energy Subsidies in Latin America (Di Bella et al , IMF 2015)

in % of GDP, Average 2011-2013

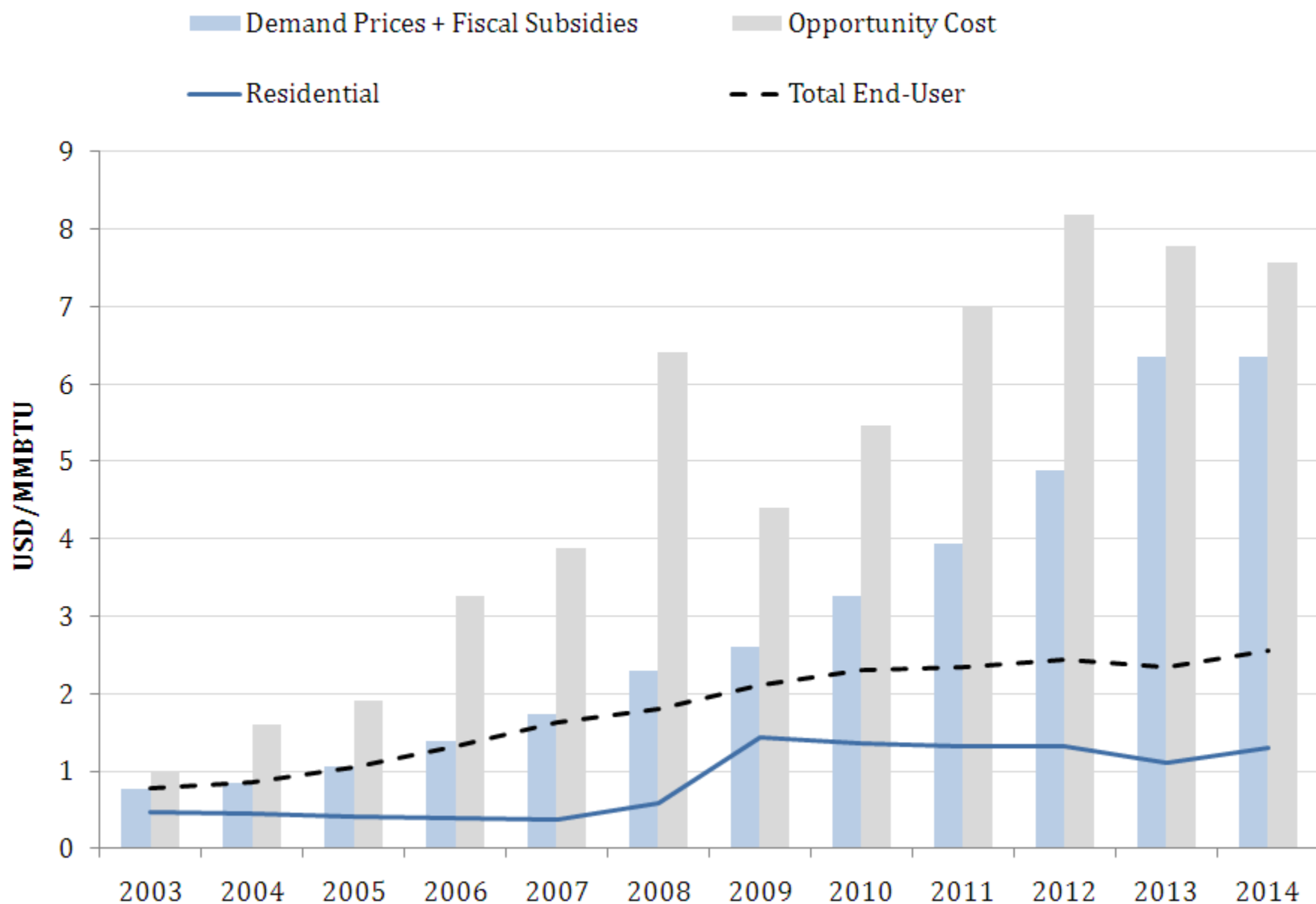


Argentina: Energy Subsidies 2003-2014

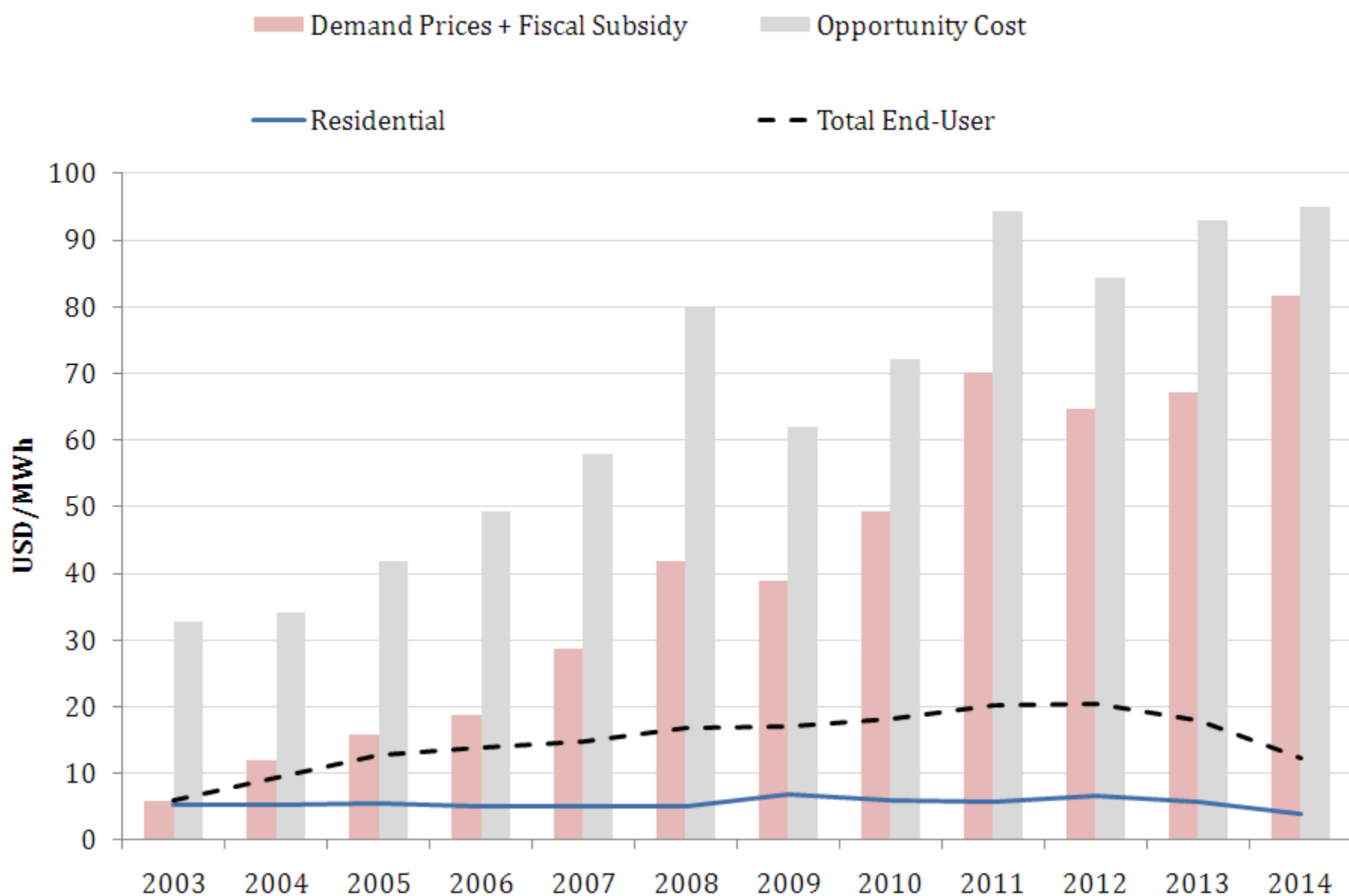
in millones of USD



Natural Gas: End-User Energy Prices and Costs 2003-2014

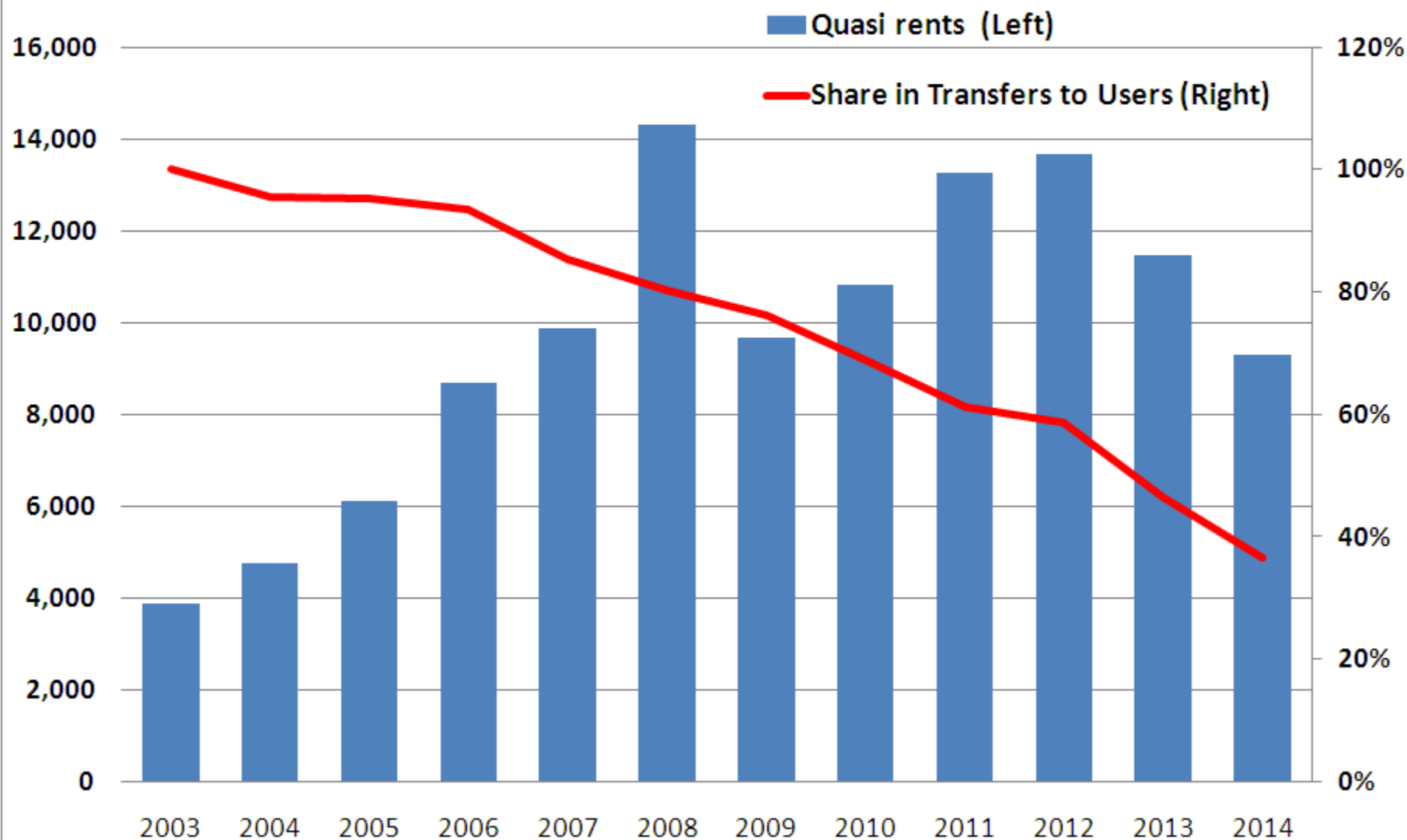


Electricity: End-User Energy Prices and Generation Costs 2003 2014



Beyond Fiscal Subsidies: Capture of Quasi Rents in natural gas and electricity 2003-2014

in millions de dollars



Argentina: Energy subsidies across households 2003-2014

| Distribution of natural gas subsidies and electricity subsidies across households between 2003-2014 | | | |
|---|-------------|-------------|-------|
| Decile | Natural Gas | Electricity | Total |
| 1 | 3.5% | 6.7% | 5.0% |
| 2 | 5.8% | 8.1% | 6.9% |
| 3 | 7.1% | 9.6% | 8.3% |
| 4 | 8.4% | 9.4% | 8.9% |
| 5 | 10.0% | 9.8% | 9.9% |
| 6 | 11.9% | 10.5% | 11.2% |
| 7 | 12.6% | 10.7% | 11.7% |
| 8 | 13.8% | 10.8% | 12.3% |
| 9 | 13.8% | 11.4% | 12.6% |
| 10 | 13.2% | 13.0% | 13.1% |

83.6%

75.6%

Source: Hancevic, Cont and Navajas (2015)

Argentina: Parameters Behind Energy Subsidies in Natural Gas

average values for 2004 and 2014

| parameters | units | values | | |
|------------------------------------|--------------|----------------------|----------------------|--|
| | | 2004 | 2014 | |
| Supply prices | | | | |
| Bolivia | USD MMBTU | 1.6 | 10.1 | |
| LNG | USD MMBTU | | 14.8 | |
| "Old Gas" | USD MMBTU | 0.7 | 2.4 | |
| "New Gas" | USD MMBTU | | 7.5 | |
| Shares | | | | |
| Imports in Supply | % | 2.4 | 28.5 | |
| LNG in Imports | % | 0 | 50.9 | |
| New Gas in Domestic Supply | % | 0 | 29.3 | |
| Average prices | | | | |
| Supply | USD MMBTU | 0.7 | 6.3 | |
| Demand | USD MMBTU | 0.8 | 2.6 | |
| Opportunity Cost (Supply Long Run) | USD MMBTU | 1.2 | 7.6 | |
| Consumption | MMBTU | 1.23*10 ⁹ | 1.60*10 ⁹ | |
| Exchange rate | ARS/USD | 2.96 | 8.14 | |
| Fiscal Subsidy | millions USD | 0 | 6031 | |
| at zero imports | millions USD | | 2130 | |
| Economic Subsidy | millones USD | 494 | 7990 | |
| at zero imports | millions USD | | 7990 | |

Argentina: Parameters Behind Energy Subsidies in Electricity

average values for 2004 and 2014

| parameter | units | values | |
|-------------------------------------|--------------|-----------|------------|
| | | 2004 | 2014 |
| Input prices for thermal generation | | | |
| Liquid Fuels | USD m3 | 207.3 | 733.2 |
| Natural Gas | USD m3 | 0.04 | 0.11 |
| Input-Output Coefficients | | | |
| Liquid Fuels | m3/MWh | 0.16 | 0.20 |
| Natural Gas | m3/MWh | 168.1 | 205.5 |
| Share | | | |
| Fuels in Thermal Generation | % | 9.5 | 25.4 |
| Variable Cost of Thermal Generation | | | |
| Liquid Fuels | USD/MWh | 27.9 | 146.7 |
| Natural Gas | USD/MWh | 6.1 | 23.1 |
| Prices | | | |
| Energy | USD/MWh | 8.1 | 54.5 |
| Residual | USD/MWh | 3.9 | 25.1 |
| Supply | USD/MWh | 12.0 | 79.6 |
| Demand | USD/MWh | 9.4 | 12.2 |
| Opportunity Cost (Supply Long Run) | USD/MWh | 32.8 | 95.0 |
| Consumption | MWh | 88.6*10^6 | 127.6*10^6 |
| Exchange rate | ARS/USD | 2.96 | 8.14 |
| Fiscal Subsidy | millones USD | 230 | 8603 |
| Economic Subsidy | millones USD | 2076 | 10568 |

Macroeconomics of subsidy reform

- ¿What impact on inflation of eliminating subsidies?
 - 2 effects: “Impact effect” vs. “Fiscal stabilization effect”.
 - Which dominates in the short run?
- A price equation where inflation depends on money (deficit, i.e. subsidies) and shocks in the exchange rate, wages and energy prices.
 - Simulation with coefficients “imported” from past history (70s,80s)
- Results: Even without exchange rate or wage adjustments, a sharp elimination of subsidies raises inflation in the short run (by 11% yoy) and reduces by the end of 2016.
 - Thus, sharp subsidy reduction requires a comprehensive stabilization framework.

Impact effect vs. Fiscal stabilization effect of eliminating energy subsidies

$$\dot{p}_t = \alpha'_1 \dot{e}_t + \alpha'_2 \dot{p}_{d_t} + \alpha'_3 \dot{w}_t + \alpha_0 \frac{v}{Y_{t-1}} (G_t - T_t) + \frac{vX_t}{Y_{t-1}} (p_{s,t-1} - p_{d,t-1})$$

Diagram illustrating the impact effect vs. fiscal stabilization effect of eliminating energy subsidies, showing the equation for inflation and its components:

- Inflation** (indicated by an arrow from the left side of the equation)
- Devaluation** (indicated by an arrow from \dot{e}_t)
- Δ Energy prices** (indicated by an arrow from \dot{p}_{d_t} , highlighted with a blue box)
- Δ Wages** (indicated by an arrow from \dot{w}_t)
- Déficit & money emission** (indicated by an arrow from $(G_t - T_t)$, highlighted with a blue box)
- Deficit & money emission by subsidies** (indicated by an arrow from $(p_{s,t-1} - p_{d,t-1})$, highlighted with a blue box)

Dismantling Frankenstein

- Context suggests a gradual adjustment towards well designed energy policy
 - Historic evidence on energy price cycles is not much in favor of a shock therapy
 - Fiscal stabilization effects will not dominate in the short run over impact effects.
 - Incidence of large adjustments will create social and political problems
- Still, the million dollar question remains: Is there a reform package that can be accepted by society and motivate large investments?
- The answer is yes. The design and details will emerge soon.
- Some central ingredients:
 - Clear long run or end-point conditions that restore economic rationale, supported by new institutional environment inspired in rule-driven and market driven mechanisms for price formation.
 - Smooth but steady transition towards regional (border) prices of energy.
 - Mitigation mechanisms that reorganize focalized subsidies at a much lower level.



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Argentina's Economic Outlook

Challenges and opportunities for the next administration

Daniel Artana

Council of the Americas

New York, April 23rd, 2015

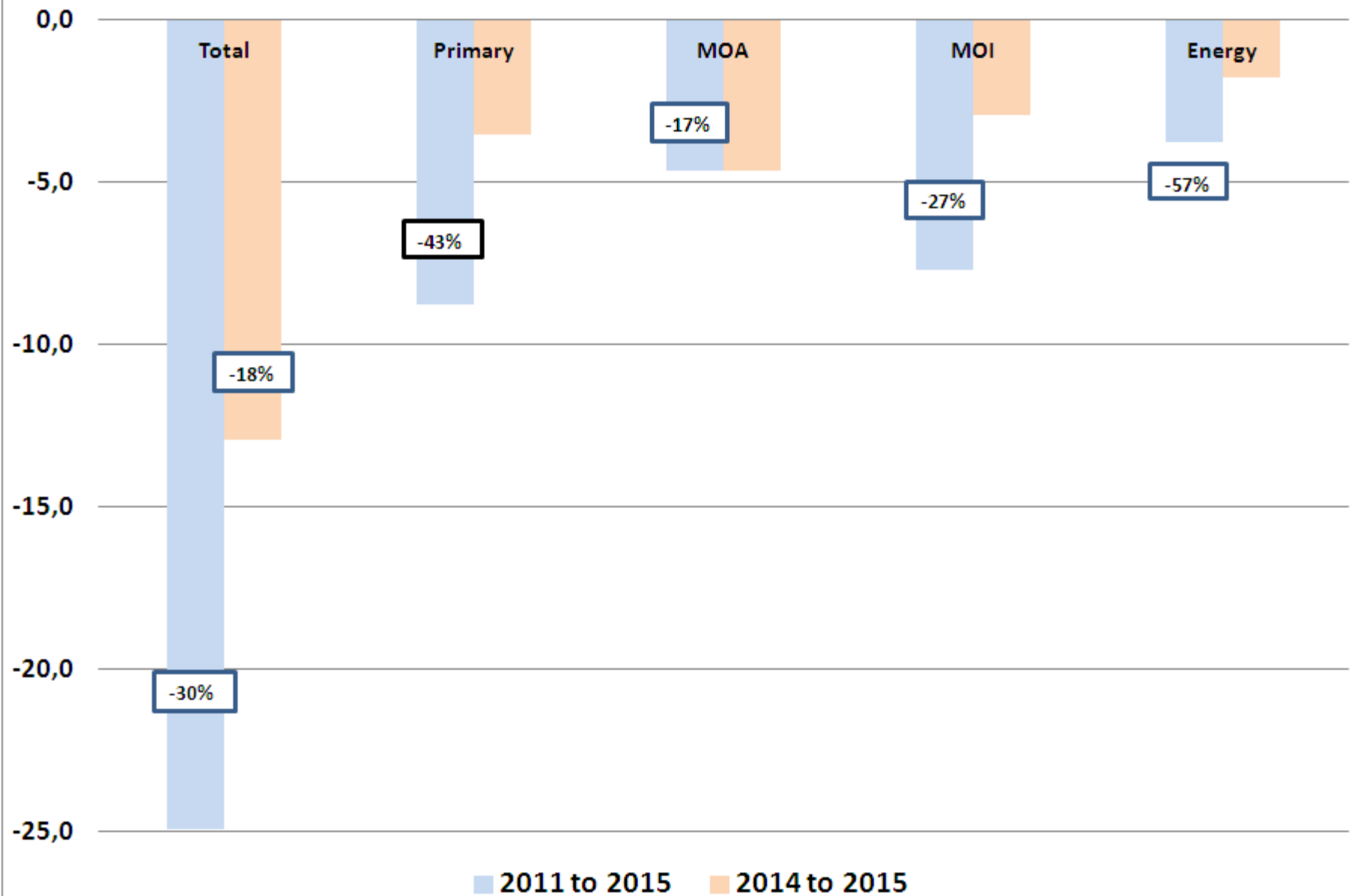
The challenges

- Overvalued currency
- High Fiscal Deficit
- Low energy prices
- High inflation
- Low foreign reserves

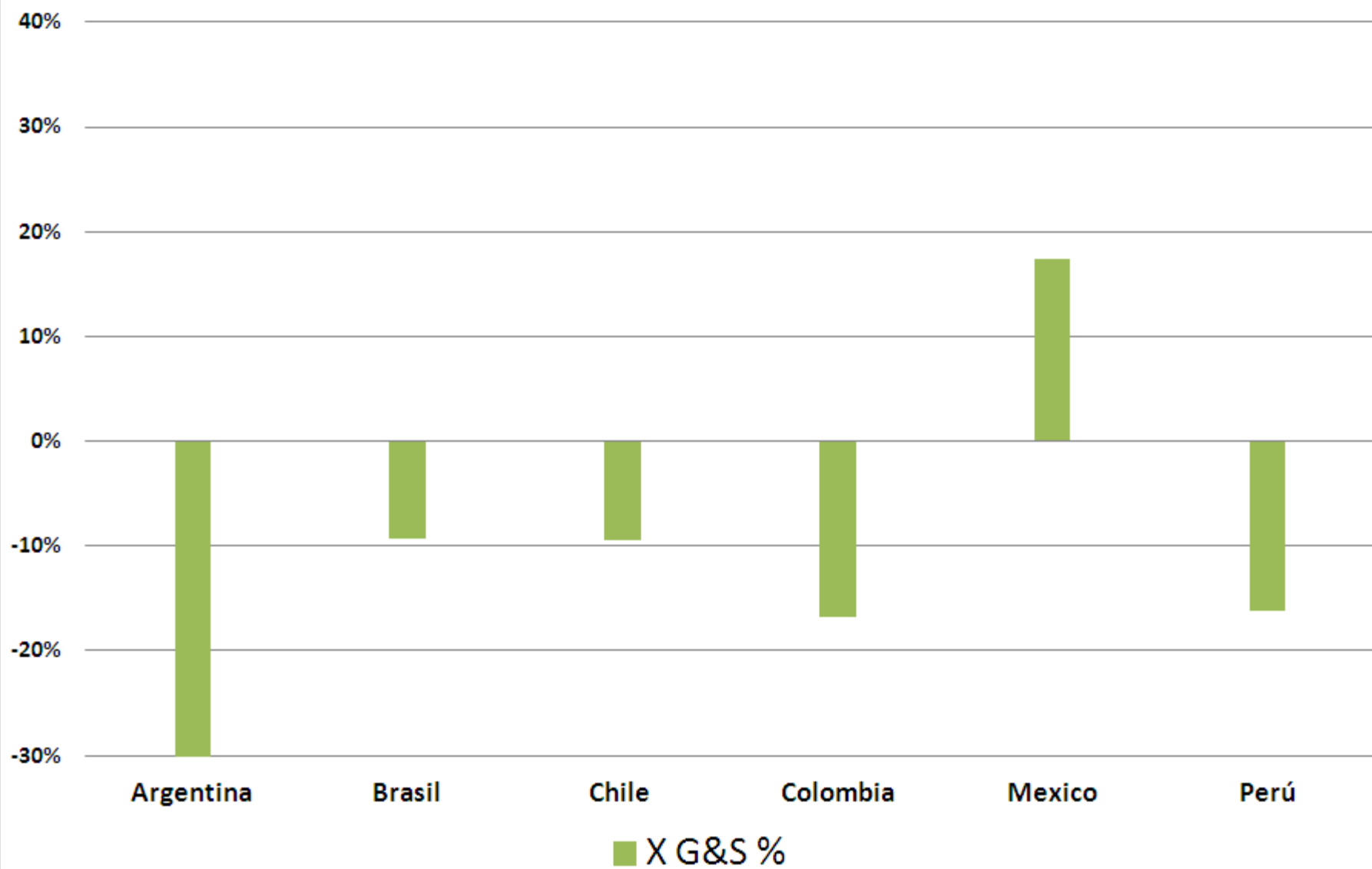
Argentina: External conditions



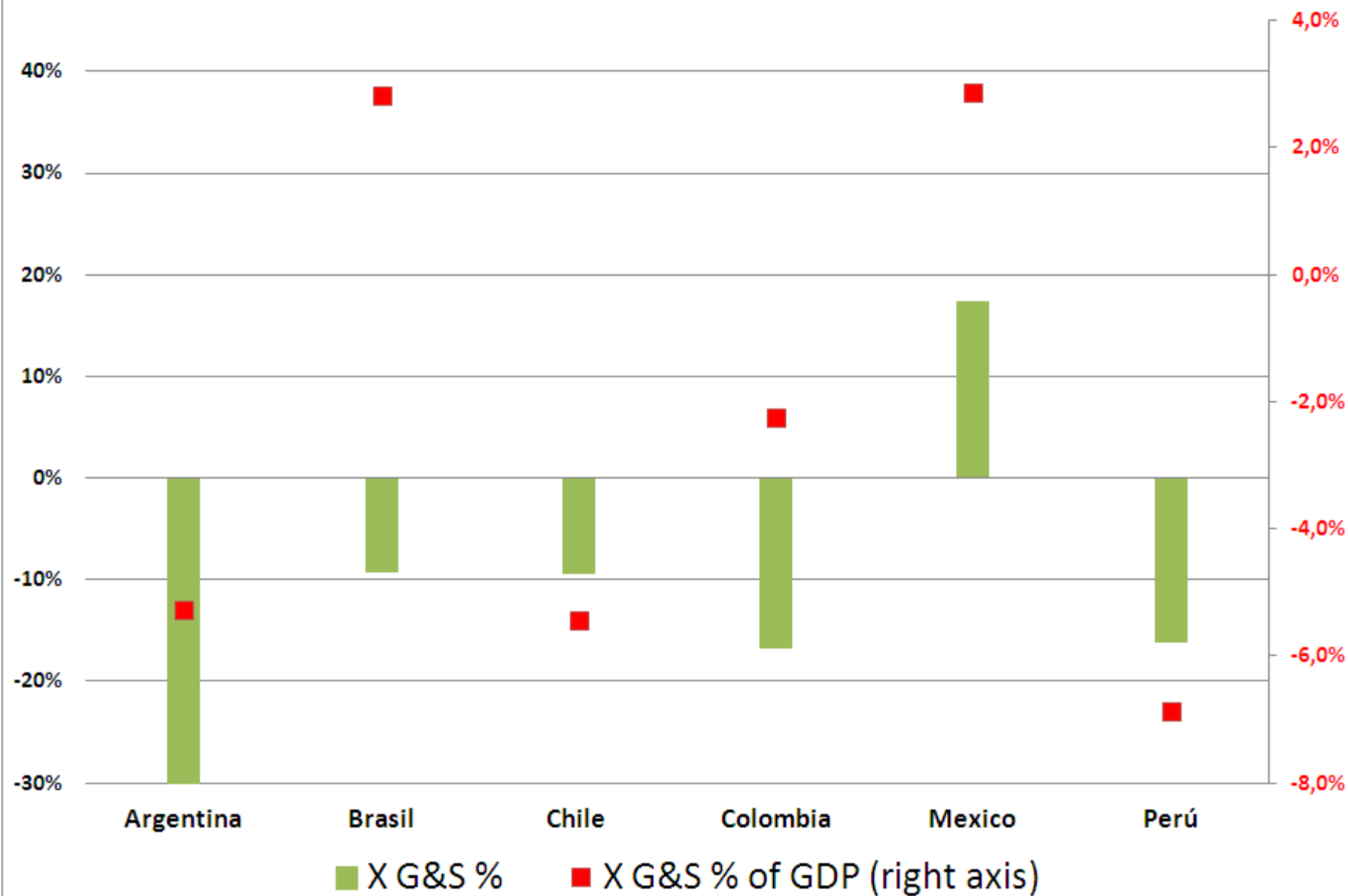
Export contraction (US\$ billion)



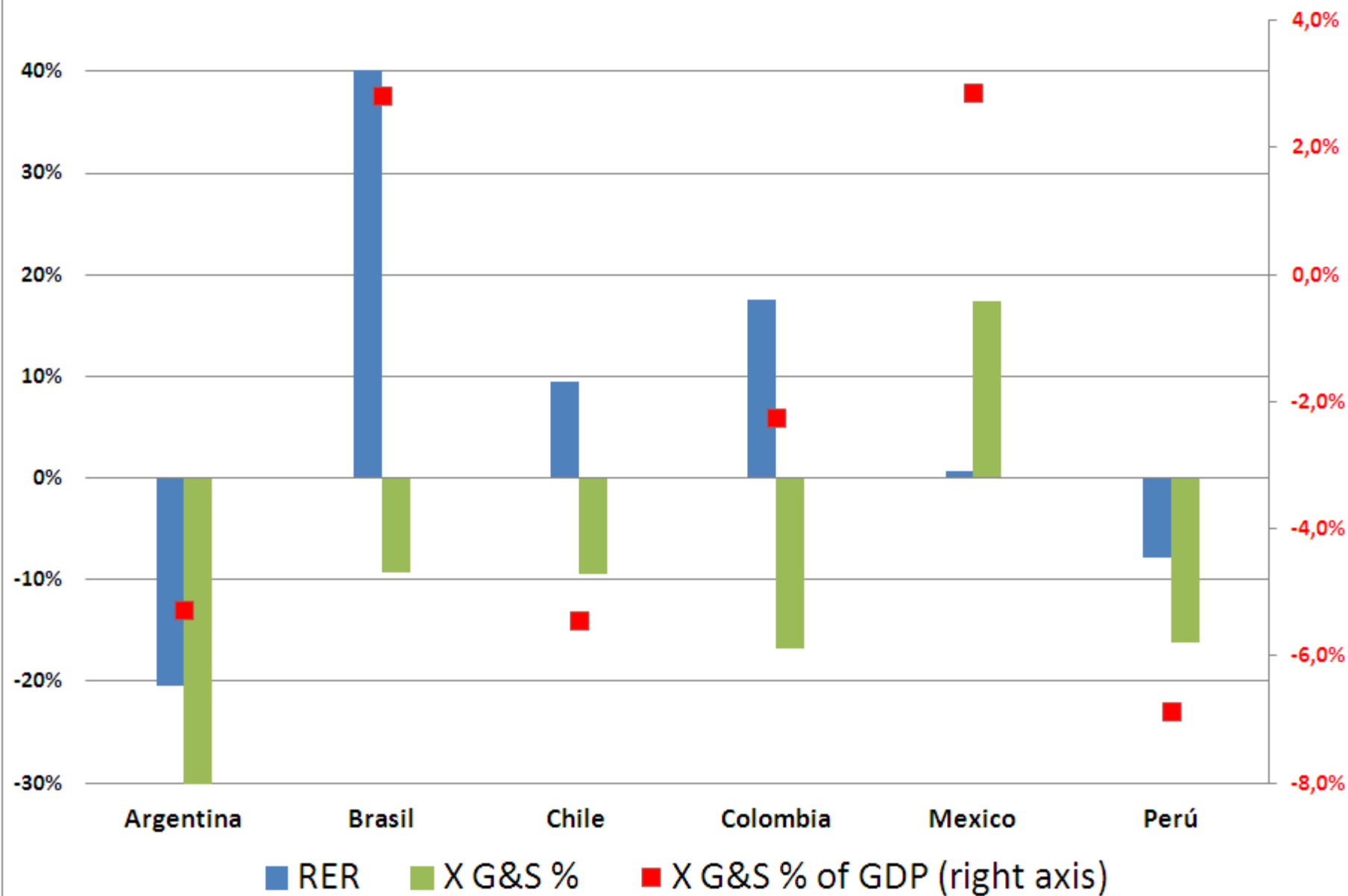
External Shock and RER (2015 vs 2011)



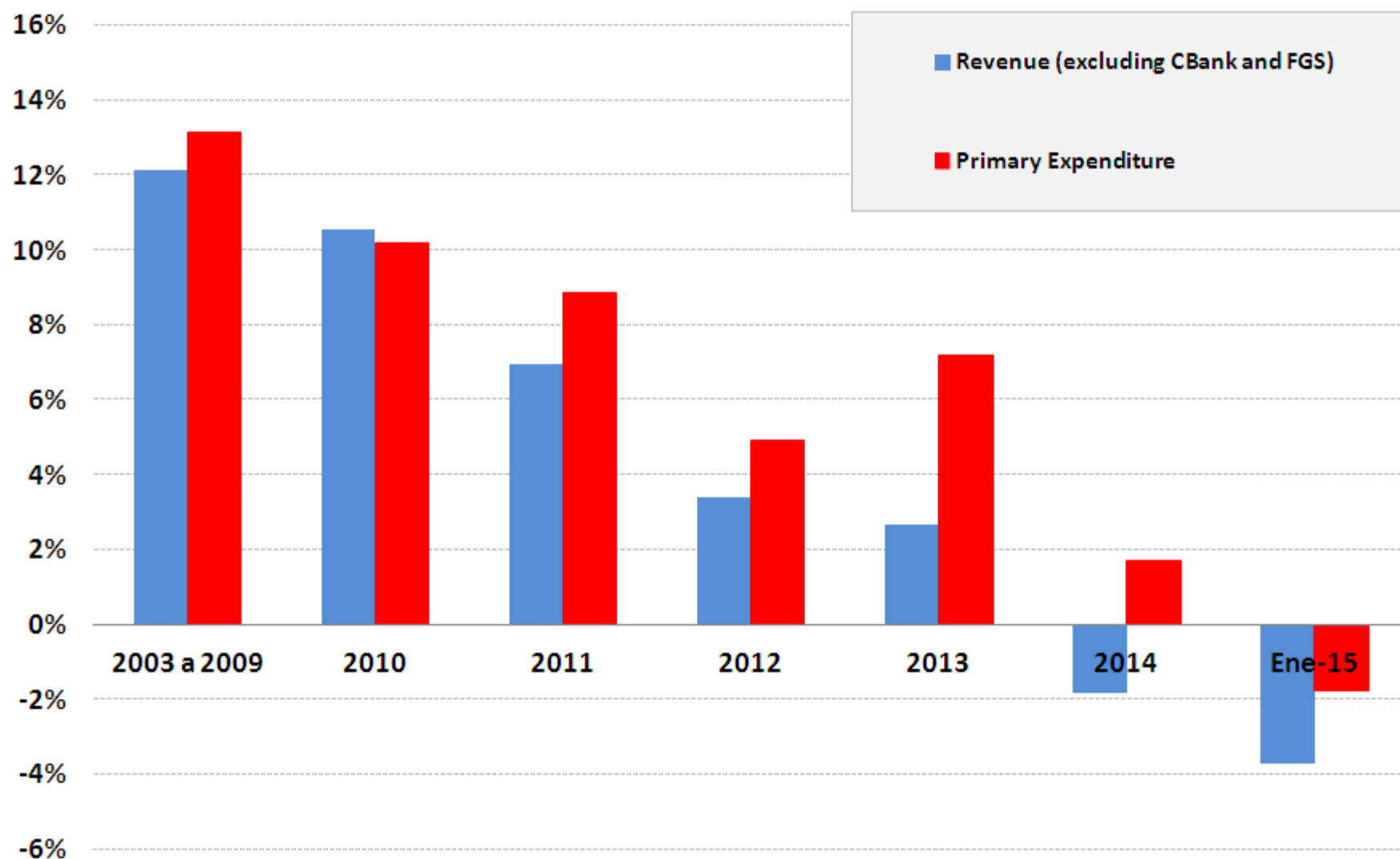
External Shock and RER (2015 vs 2011)



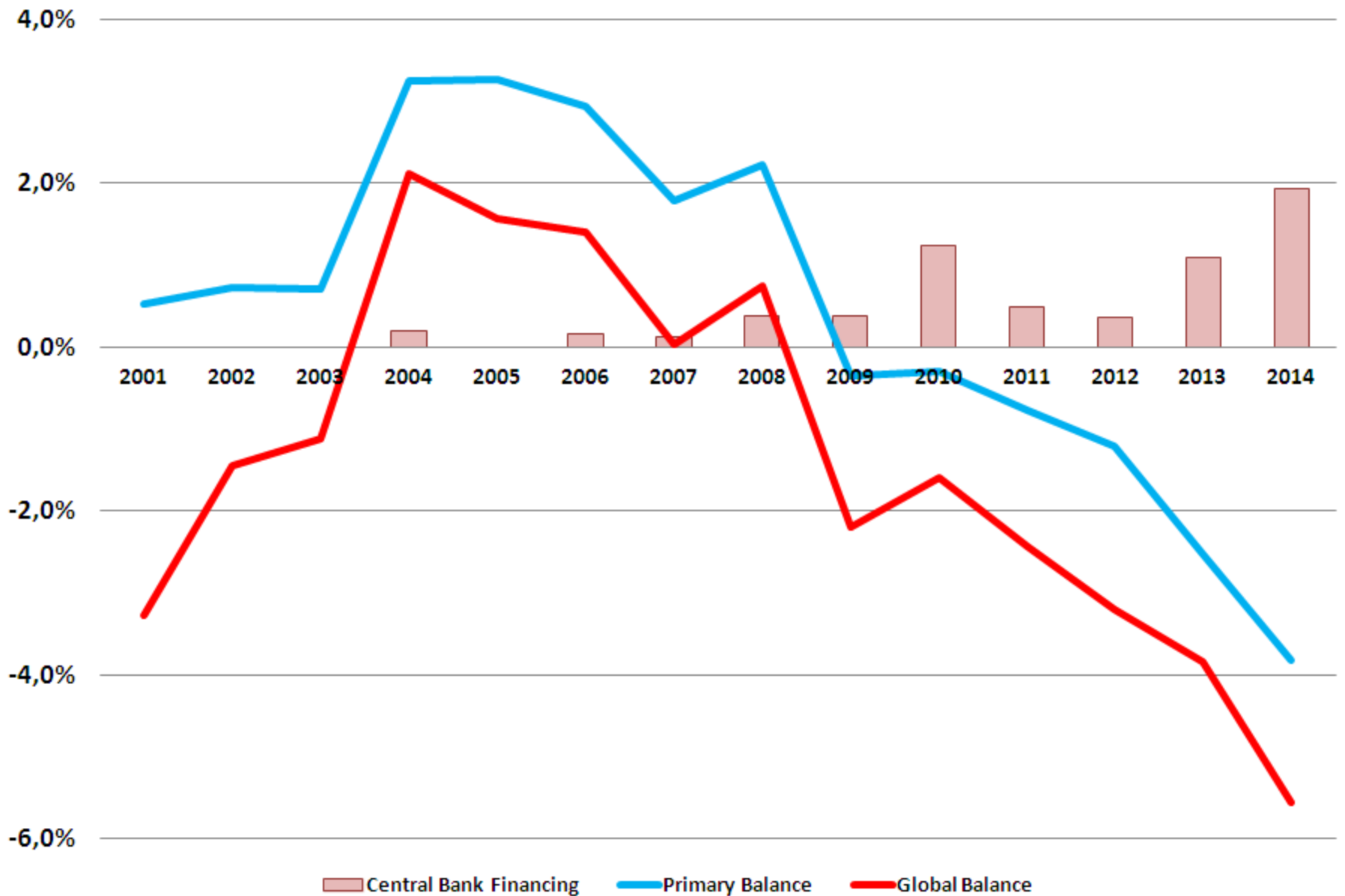
External Shock and RER (2015 vs 2011)



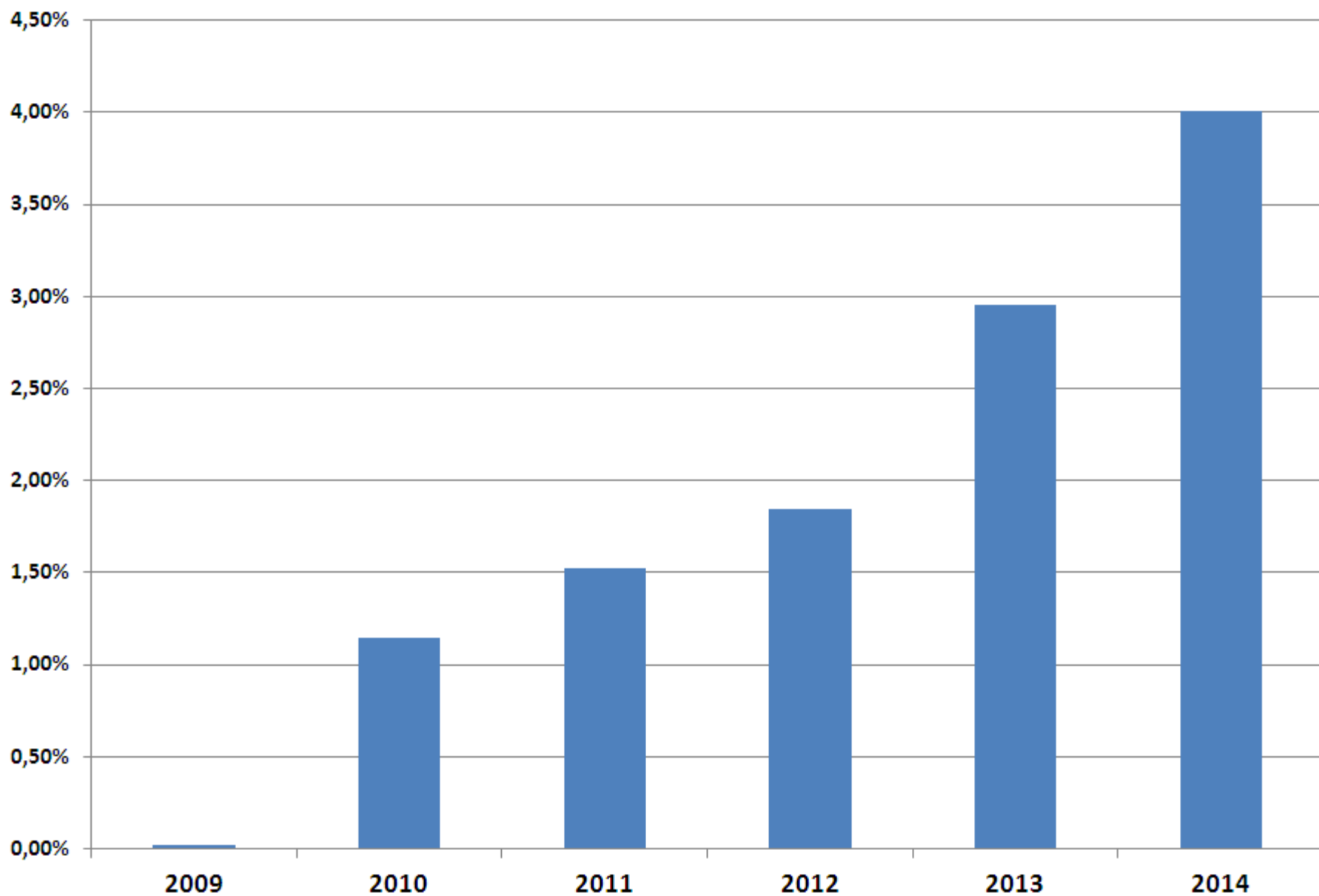
Annual % change of primary expenditure and revenue (at constant prices)



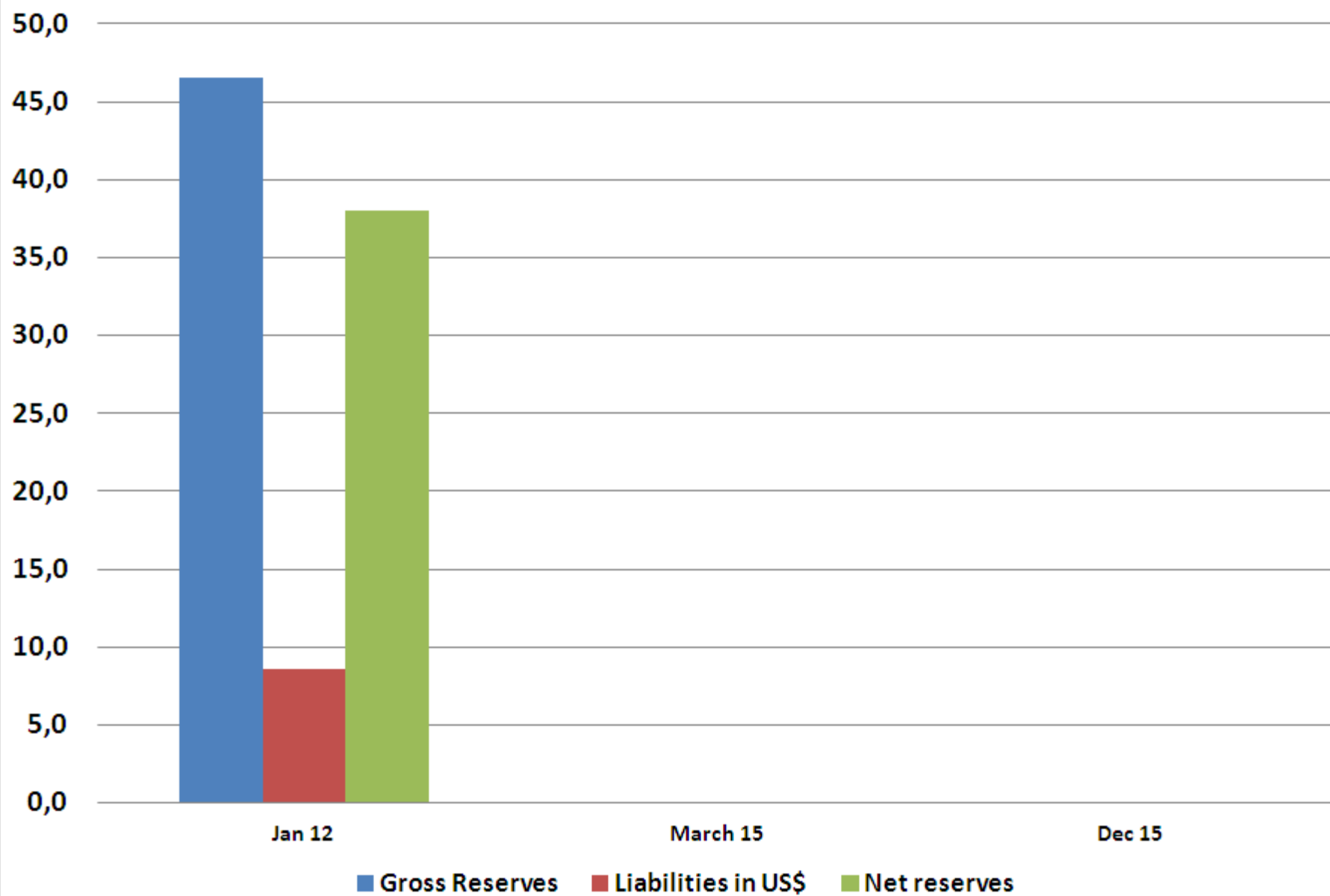
Federal Fiscal Balance (% of GDP)



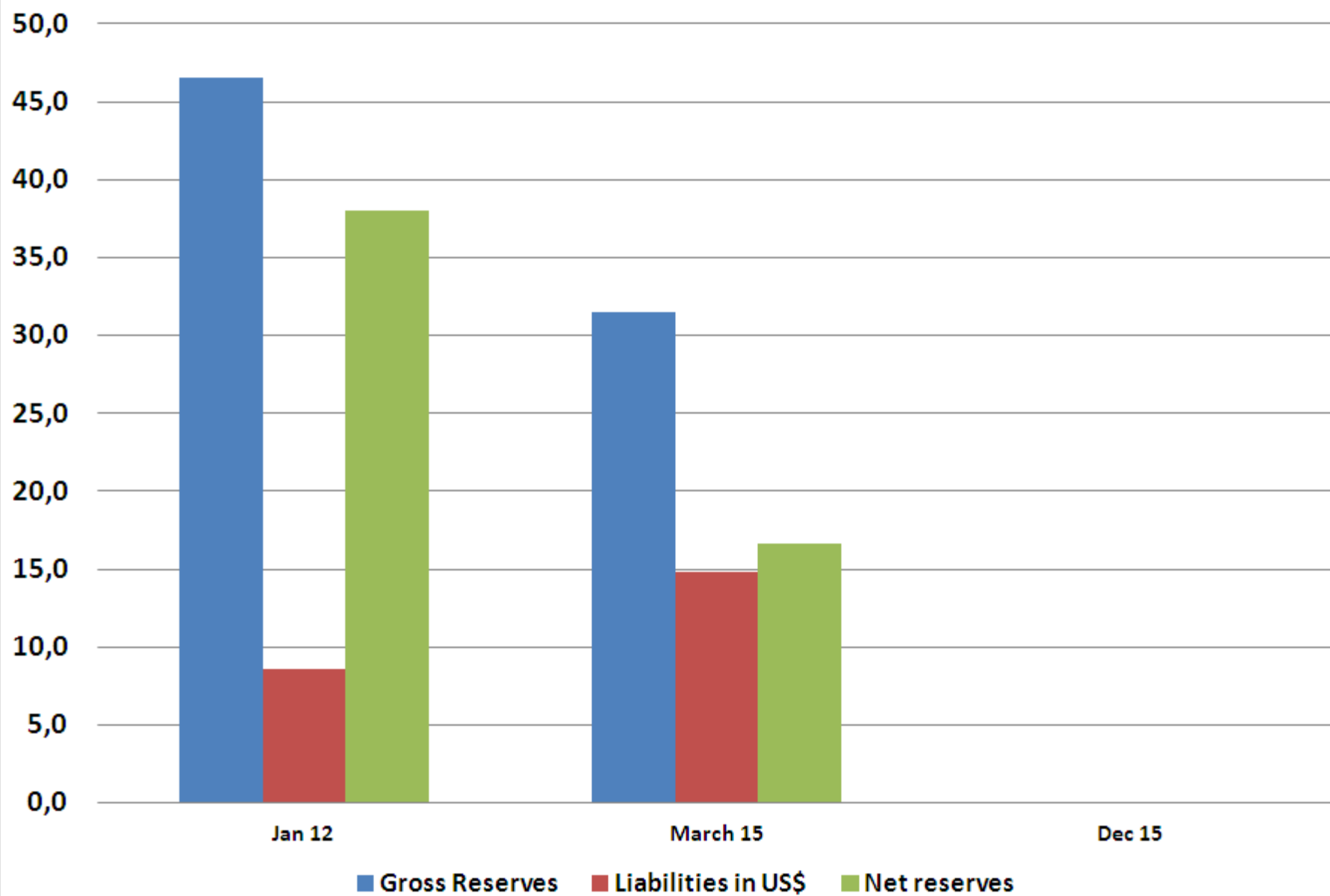
Money printing for the Treasury (% of GDP)



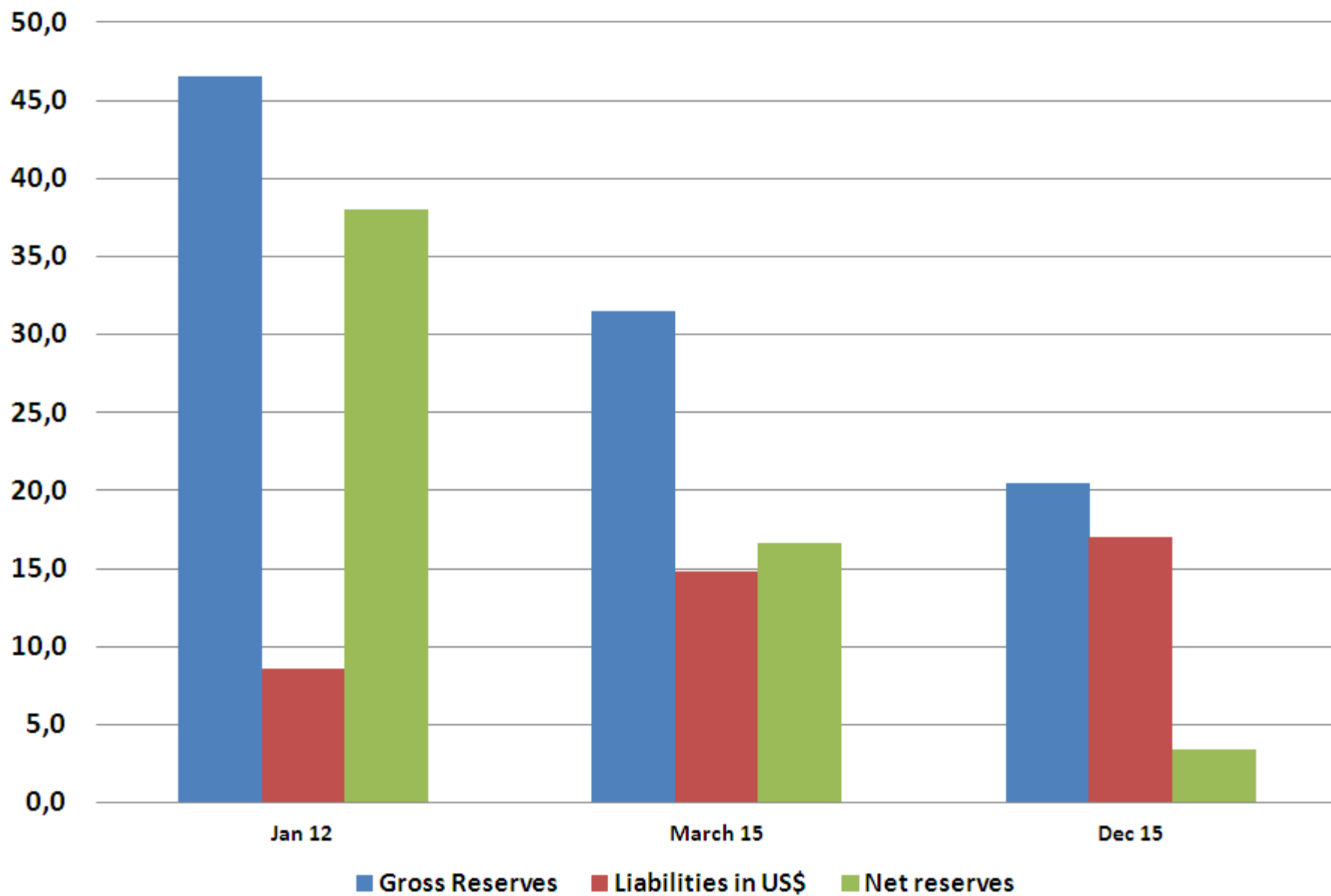
Central Bank Reserves (US\$ billions)



Central Bank Reserves (US\$ billions)



Central Bank Reserves (US\$ billions)



The opportunities ahead

- Large non-conventional gas and oil resources
- Output gap
- Relatively low public debt
- Getting back to “normal”

The Global Competitiveness Index 2013-2014

| Country/Economy | GCI 2013-2014 | | GCI 2012-2013 | |
|--------------------|---------------|-------|---------------|--------|
| | Rank | Score | Rank | Change |
| Chile | 34 | 4.61 | 33 | -1 |
| Panama | 40 | 4.50 | 40 | 0 |
| Costa Rica | 54 | 4.35 | 57 | 3 |
| Mexico | 55 | 4.34 | 53 | -2 |
| Brazil | 56 | 4.33 | 48 | -8 |
| Peru | 61 | 4.25 | 61 | 0 |
| Colombia | 69 | 4.19 | 69 | 0 |
| Ecuador | 71 | 4.18 | 86 | 15 |
| Uruguay | 85 | 4.05 | 74 | -11 |
| Guatemala | 86 | 4.04 | 83 | -3 |
| El Salvador | 97 | 3.84 | 101 | 4 |
| Bolivia | 98 | 3.84 | 104 | 6 |
| Nicaragua | 99 | 3.84 | 108 | 9 |
| Argentina | 104 | 3.76 | 94 | -10 |
| Dominican Republic | 105 | 3.76 | 105 | 0 |
| Honduras | 111 | 3.70 | 90 | -21 |
| Paraguay | 119 | 3.61 | 116 | -3 |
| Venezuela | 134 | 3.35 | 126 | -8 |

- Ranking out of 148 countries.
- Looks at 12 indicators of competitiveness
- Average of Brazil, Chile, Colombia, Mexico, Peru & Uruguay is 60