

The Macro Tripod for Wealth Creation and The Brazilian Case

EDUARDO AUGUSTO DE LIMA GIULIANI¹

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Abstract

The paper proposes that wealth creation is determined by growth in aggregate demand (Keynes), which is influenced primarily by exchange rate, interest rate and fiscal savings. The Brazilian economy has destroyed R\$3 trillions since 2014 in a total disrespect to macro-economic know-how built by Friedman (expansionary policy), Keynes (aggregate demand) and Smith (laissez-faire). The economic debate goes around secondary variables like inflation when the empirical evidence demonstrates that it is not correlated to wealth creation at all. The use of interest rates to fight inflation is a disregard to laissez-faire and the investment cycle. The paper will demonstrate using system dynamic concepts and empirical evidence the relevance of the tripod in the wealth creation process, and how Brazil moved away from it since 1990 with fake liberalism.

KEYWORDS: GROWTH, INCLUSIVE GROWTH, EXCHANGE-RATE, MACRO TRIPOD

¹ Brazilian Productivity Study at McKinsey Global Institute (Telecom, Construction and Macro); MBA from Harvard; BS in Industrial Engineering from USP

Considering that the purpose of Economics is to maximize the wealth creation process, Brazil has gone in the opposite direction over the last few years, and has performed poorly over the last 40. The reason lies on bad macro-economic policies, not aligned with best practices around the world that consider knowledge developed by Smith, Keynes and Friedman: laissez-faire and liberalism in price mechanism (for products and services), aggregate demand and expansionary policy.

Eduardo brings to the paper his work and academic experiences on how the economy functions based on the perspective of the businessman, the human behavior model (REMM) of Michael Jensen, investment decisions in venture capital, analyst in Telecom and Residential Construction sectors during the Brazilian Productivity Study at the McKinsey Global Institute, all triggered by the orientation of Professor Bruce R Scott and his Course National Economic Strategies at Harvard Business School, with emphasis on the success of East Asian countries (exchange rate factor), as well as the influence of Luiz Carlos Bresser Pereira and Yoshiaki Nakano on interest rates and government savings.

Topics:

- Economic Theory and Brazilian Policies
- The Economic Growth System
- The X-Rate for International Economic Competitiveness
- Fake link between inflation and growth
- The commitment for One Community, maximum growth with social inclusion

Economic Theory and Brazilian Policies

The purpose of economics is to maximize wealth creation with a good income distribution. The liberalism, with Adam Smith, has a strong emphasis on laissez-faire, the absence of government intervention in the way markets work, with supply and demand forces fixing the prices. High interest rates in Brazil are an evidence that the government is trying to control prices to decrease market inflation. The impact on demand decrease prices as well as the incentive for businessmen to invest to increase supply to match demand. The government fights inflation spending R\$400B/year in interests, increasing fiscal deficit (major cause of hyper-inflation), given that there is no correlation between inflation below 40% per year and wealth creation.

John M Keynes developed the concept of aggregate demand and the importance of maximizing it to fight unemployment. It is never a good macro policy to have idle labor at home. This labor could be building wealth, instead of being wasted. The maximization of aggregate demand depends on x-rate (external consumption and import substitution) and investments by the private and public sectors. Investments depend on profitability of the

private sector as well as fiscal savings and borrowings by the public sector. The free floating x-rate in our country creates the Dutch disease that strengths the currency and decreases the aggregate demand on higher value added products and services. The Dutch diseases is elevated through Lei Kandir, that allows export of mineral and agricultural commodities free of taxes. The opposite of best practices used by UK (wool and textiles) and Holland.

Milton Friedman and monetarism's policies advocate monetary base expansionary policies with low interest rates when there is high unemployment and idle resources. Unemployment raised dramatically since 2014 and the government is keeping high interest rates regardless.

In summary, our depression is being created by a total disregard to good policies defended by Smith, Keynes and Friedman since the lessons of the Great Depression.

Table_1 shows the depression being created by high nominal deficit caused by increased interest rates. Table_2 estimates the loss at R\$3 trillions until today.

Table_1: The effect of increased interest rates in the Brazilian economy

		2.011	2.012	2.013	2.014	2.015
Superávit primário	R\$B	128	105	91	(33)	(111)
- Juros	R\$B	(236)	(213)	(249)	(311)	(502)
Déficit nominal	R\$B	(108)	(109)	(158)	(344)	(613)
Crescimento PIB		3,9%	1,9%	3,0%	0,1%	-3,8%
SELIC		11,5%	8,5%	8,4%	11,0%	13,6%
IPCA		6,5%	5,8%	5,9%	6,4%	10,6%
Câmbio	R\$/US\$	1,60	1,90	2,20	2,30	3,50

Table_2: Economic loss associated with the depression

		2.013	2.014	2.015	2.016
PIB (moeda 2015)		6.000	6.006	5.778	5.604
Cresc médio	2,6%		6.156	6.316	6.480
Perda PIB			(150)	(538)	(876)
Acumulado			(150)	(688)	(1.564)
Dívida		51,7%	57,2%	66,2%	75,2%
		3.102	3.435	3.825	4.215
Aumento			(333)	(389)	(390)
Acumulado			(333)	(723)	(1.113)
Perda Acumulada			(483)	(1.411)	(2.677)
Perda mensal			(40)	(77)	(105)

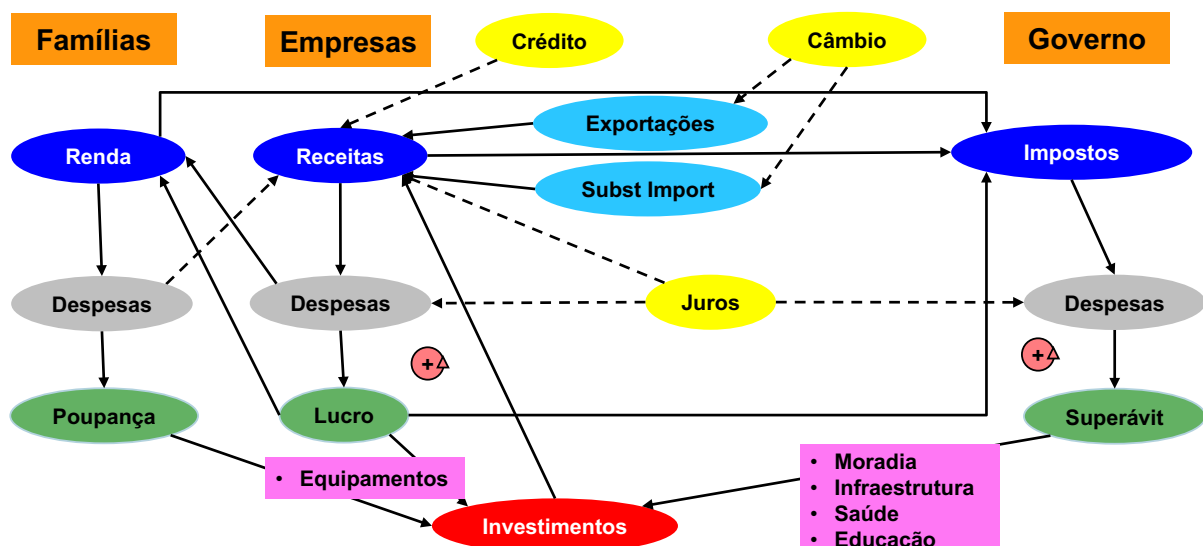
The Economic Growth System

Economic growth can be implied by the growth of aggregate demand. The three main levers of economic growth are:

1. the x-rate through exports, import substitution, increased private sector profitability and increased government revenues
2. moderate interest rates facilitating credit, decreasing private sector costs and increasing government savings
3. fiscal savings through investments in infrastructure

The levers and their impact in the economy can be seen in Exhibit_1 below.

Exhibit_1: The Economic System



Economic growth is about increasing companies and government revenues and profits/surpluses. The incentives created by x-rate, interest rates and gov't savings used into investments are very clear and mathematical increasing the aggregate demand.

The X-Rate for International Economic Competitiveness

International competition is based on price, not on productivity. Considering the productivity of each country, one can calculate the correct level of the x-rate in order for a country to have a specific price competitiveness. Table_3 takes USA as the reference indexed at 100. Considering the average productivity of the economy as GDP/cap, only Singapore, Malaysia and Taiwan are more competitive than the USA. If the Industrial sector productivity becomes the reference, many others are more cost competitive than the USA.

Brazil competitiveness is very low in both rankings.

Table_3: International Competitiveness Exchange rate

	Média 2013-2015				2015					Ind Transf		Emprego		Pop
	GDP/cap	Growth	Dev	CEI Geral	GDP/cap-Ind Transf	CEI Ind Transf	GINI	HDI	CPI	emp %	PIB %	Agr %	Ind %	
United States	54.294	2,2%	100%	100	60.506	100	41	0,92	76	11%	12%	2%	18%	322
Singapore	82.803	3,2%	67%	229	102.994	272	46	0,91	85	15%	18%	1%	20%	6
Malaysia	25.045	5,1%	43%	109	36.956	159	46	0,78	50	16%	24%	13%	28%	30
Taiwan (China)	45.734	2,7%	49%	174	43.640	155	34	0,88	62	30%	29%	4%	36%	24
Ireland	51.087	3,8%	102%	93	74.618	136	33	0,92	75	14%	20%	5%	18%	5
Thailand	15.645	2,1%	37%	78	26.349	129	39	0,73	38	16%	28%	39%	22%	68
Russia	24.179	-0,7%	49%	95	26.587	124	42	0,80	29	14%	15%	9%	33%	143
Indonesia	10.625	5,1%	33%	59	22.143	119	36	0,68	36	10%	22%	35%	21%	258
Netherlands	47.977	0,8%	103%	86	63.691	117	28	0,92	87	9%	12%	2%	16%	17
Canada	44.709	1,8%	109%	76	66.931	115	34	0,91	83	7%	11%	2%	19%	36
Sweden	46.157	2,1%	121%	71	62.637	100	27	0,91	89	12%	17%	2%	19%	10
Mexico	17.922	1,9%	58%	57	30.831	97	48	0,76	35	10%	18%	13%	22%	127
Chile	23.043	2,8%	63%	68	32.565	95	51	0,83	70	8%	12%	9%	25%	18
Germany	46.065	1,2%	98%	87	50.343	95	30	0,92	81	21%	23%	1%	28%	81
Australia	46.360	2,4%	127%	68	61.688	93	35	0,94	81	5%	7%	2%	20%	24
Poland	25.211	2,9%	54%	86	27.051	93	32	0,84	62	17%	18%	12%	30%	39
Colombia	13.368	4,0%	54%	47	23.136	93	54	0,72	37	7%	13%	16%	21%	48
Peru	11.838	3,5%	52%	42	26.143	93	45	0,73	36	7%	16%	25%	17%	31
Spain	33.949	1,1%	85%	74	39.381	87	36	0,88	58	11%	13%	5%	20%	46
Korea	35.245	3,0%	77%	84	36.825	81	31	0,90	56	30%	31%	6%	37%	50
Denmark	44.536	0,7%	129%	64	54.107	79	29	0,92	91	11%	14%	3%	19%	6
Argentina	22.248	1,3%	61%	67	27.447	76	42	0,84	32	13%	16%	0%	23%	43
Panama	19.509	6,9%	57%	63	25.984	74	52	0,78	39	5%	6%	15%	19%	4
Turkey	19.672	3,4%	52%	71	20.154	73	40	0,76	42	17%	17%	22%	26%	79
Hong Kong SAR	54.999	2,7%	73%	139	32.521	72	54	0,91	75	2%	1%	0%	12%	7
Ecuador	11.118	2,6%	55%	37	23.729	72	47	0,73	32	6%	14%	26%	18%	16
Japan	37.533	0,7%	95%	73	36.042	70	32	0,89	75	19%	19%	4%	27%	127
United Kingdom	39.693	2,4%	111%	66	45.045	69	33	0,91	81	10%	11%	1%	19%	65
France	40.579	0,7%	104%	73	38.096	69	33	0,89	70	12%	11%	3%	21%	64
Israel	33.066	2,8%	110%	55	39.742	62	43	0,89	61	12%	14%	2%	19%	8
Italy	35.382	-0,4%	95%	69	30.821	61	35	0,87	44	18%	15%	4%	27%	60
South Africa	13.060	1,7%	49%	49	15.491	58	63	0,67	44	11%	13%	4%	25%	54
Portugal	27.013	0,3%	77%	65	24.035	58	36	0,83	63	15%	13%	11%	24%	10
Philippines	6.962	6,4%	41%	31	14.026	57	43	0,67	35	10%	20%	31%	15%	101
China	13.201	7,3%	58%	42	18.817	53	37	0,73	37	21%	29%	30%	31%	1.376
Brazil	15.951	-0,1%	67%	44	18.029	53	53	0,76	38	10%	12%	14%	22%	208
Uruguay	20.953	3,7%	80%	49	23.798	53	42	0,79	75	11%	13%	11%	23%	3
Paraguay	8.425	7,1%	50%	31	15.051	52	48	0,68	27	6%	12%	27%	16%	7
Vietnam	5.660	6,0%	36%	29	9.942	46	39	0,67	31	10%	18%	45%	22%	93
Costa Rica	14.868	3,3%	71%	39	18.310	43	49	0,77	55	13%	16%	13%	19%	5
India	5.805	7,2%	27%	39	6.719	41	34	0,61	38	15%	17%	44%	27%	1.311
Totais	17.943	média												5.029
GDP TOT (US\$B)	90.242													11

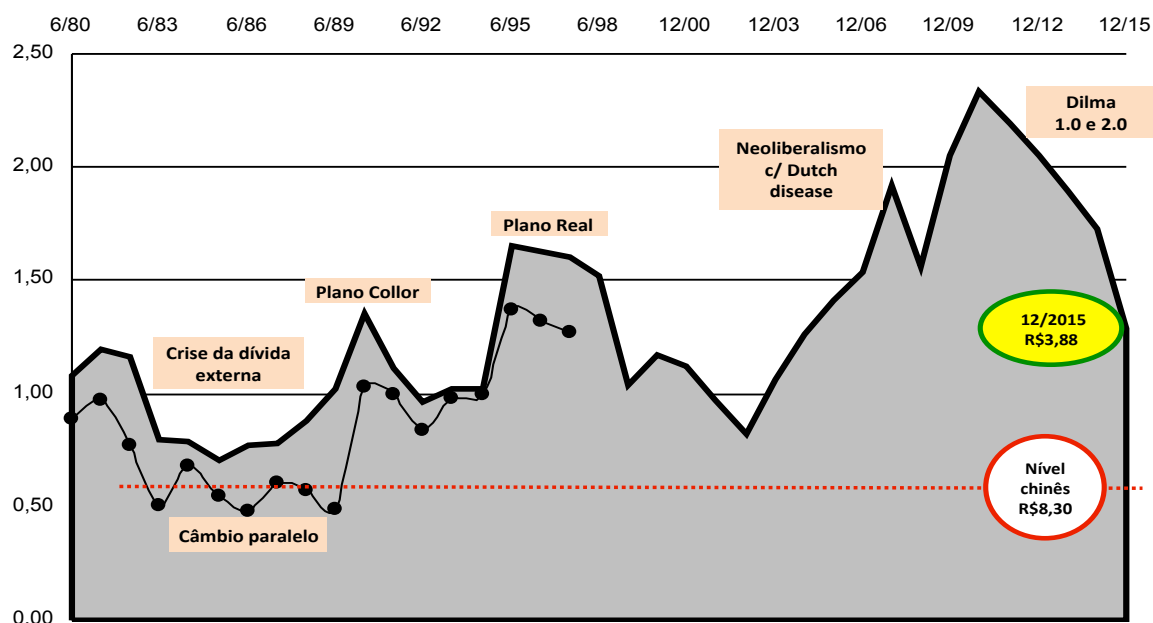
The x-rate that brings Brazil to the same level as the USA is R\$8,80 as calculated in Table_4. In 2015 GDP/cap in PPP was at US\$15,690, 28% of US's. The x-rate at R\$4.00/US\$ was producing a GDP/cap (nominal) of US\$8,802, with a 44% devaluation. If we move the x-rate to R\$8,00, the nominal GDP/cap becomes US\$4.404, with a 72% devaluation, compensating the productivity 72% below the USA.

Table_4: ICE calculation for Brazil

(dez-2015)	BR	EUA	Taxa	
PIB/cap (PPC)	15.690	55.904		28%
PIB/cap nominal	8.802	55.904	4,00	
PIB/cap (alvo)	4.404	55.904	8,00	dez-2105
	+inflação		10%	
			8,80	

Exhibit_2 shows the historical effective x-rate in Brazil. The R\$8,30 level brings Brazil to the parallel rate of the 80s, period during which Brazil was still going through the industrialization process. The Collor Plan over valued the currency and started de de-industrialization bringing manufacturing share of GDP from 25% to 9% today.

Exhibit_2: Effective exchange-rate for Brazil 1980-2015



Fontes: US\$ Commercial (OANDA), Consumer Price Index (US Statistical Abstract and Inflation Calculator); IGP-DI (FGV)

Fake link between inflation and growth

There is no correlation between inflation below 40% per year and economic growth. South Korea, as an example in Table_5, grew by more than 10% per year between 1960 and 1980 with average inflation around 19%. Countries grow by stimulating aggregate demand. If demand is higher than supply prices go up, increasing companies profitability, generating resources for new investments to increase supply. This “growth” inflation is beneficial to the economy. Trying to fight it using interest rates breaks this investment cycle, increase government deficit (through lower taxes and increased expenses) and is a disrespect to laissez faire. Good macro planning brings inflation down over the years, as demand and supply become balanced. Low inflation is a sign of a well planned and well organized economy, however it is not a sign of growth.

Table_5: Historical GDP growth and inflation for selected countries (1960-1995)

País	Chile		Coréia do Sul		China		Malasia		Tailandia		India	
Pop	17.948		50.293		1.376.049		30.331		67.959		1.311.051	
PIB/CAP	23.564		36.528		14.190		26.141		16.081		6.209	
Units	Cresc	Inf	Cresc	Inf	Cresc	Inf	Cresc	Inf	Cresc	Inf	Cresc	Inf
1960												
1961	4,0%	7,5%	4,9%	14,1%	-27,3%	15,2%	7,6%	-7,8%	5,4%	3,7%	3,7%	2,1%
1962	5,2%	12,0%	2,5%	18,4%	-5,6%	-0,2%	6,4%	-1,1%	7,6%	0,5%	2,9%	4,4%
1963	6,1%	43,9%	9,5%	28,5%	10,2%	-2,6%	7,3%	16,8%	8,0%	-1,2%	6,0%	8,4%
1964	2,7%	46,4%	7,6%	32,9%	18,3%	-0,3%	5,4%	1,1%	6,8%	2,7%	7,5%	8,6%
1965	0,4%	41,2%	5,2%	6,4%	17,0%	0,9%	7,7%	2,7%	8,2%	4,3%	-2,6%	8,3%
1966	10,0%	28,5%	12,7%	14,0%	10,7%	-1,7%	7,8%	-1,4%	11,1%	8,2%	-0,1%	13,3%
1967	3,6%	25,2%	6,1%	16,1%	-5,7%	0,7%	3,9%	-2,3%	8,6%	-1,7%	7,8%	8,6%
1968	3,8%	33,8%	11,7%	15,9%	-4,1%	1,3%	8,0%	-3,3%	8,1%	-0,3%	3,4%	2,4%
1969	3,5%	40,0%	14,1%	14,6%	16,9%	-3,8%	4,9%	4,9%	6,6%	3,3%	6,5%	3,3%
1970	2,1%	40,7%	12,9%	20,2%	19,4%	-2,6%	6,0%	-0,5%	11,4%	-5,0%	5,2%	1,6%
1971	9,0%	18,3%	10,4%	12,1%	7,0%	0,7%	5,8%	3,6%	4,9%	-0,8%	1,6%	5,3%
1972	-0,8%	85,5%	6,5%	15,9%	3,8%	0,0%	9,4%	0,3%	4,3%	6,3%	-0,6%	10,8%
1973	-4,9%	414,0%	14,8%	13,0%	7,9%	0,1%	11,7%	17,9%	10,2%	18,4%	3,3%	17,8%
1974	2,5%	665,4%	9,4%	30,4%	2,3%	0,2%	8,3%	12,7%	4,5%	20,3%	1,2%	16,7%
1975	-11,4%	334,6%	7,3%	24,4%	8,7%	-1,2%	0,8%	-3,1%	5,0%	3,5%	9,1%	-1,6%
1976	3,4%	250,6%	13,5%	21,2%	-1,6%	-0,2%	11,6%	12,7%	9,3%	4,5%	1,7%	6,0%
1977	8,7%	105,8%	11,8%	14,8%	7,6%	1,1%	7,8%	6,9%	9,8%	6,0%	7,3%	5,6%
1978	7,5%	57,7%	10,3%	22,2%	11,9%	1,9%	6,7%	9,8%	10,3%	9,7%	5,7%	2,5%
1979	8,7%	45,7%	8,4%	18,5%	7,6%	3,6%	9,3%	12,1%	5,4%	8,6%	-5,2%	15,7%
1980	8,1%	28,8%	-1,9%	24,4%	7,8%	3,8%	7,4%	6,9%	5,2%	12,7%	6,7%	11,5%
1981	4,7%	13,0%	7,4%	17,4%	5,2%	2,3%	6,9%	1,1%	5,9%	8,4%	6,0%	10,8%
1982	-10,3%	8,5%	8,3%	6,1%	9,0%	-0,1%	5,9%	2,6%	5,4%	5,1%	3,5%	8,1%
1983	-3,8%	30,7%	12,2%	4,9%	10,8%	1,2%	6,3%	5,9%	5,6%	3,6%	7,3%	8,6%
1984	8,0%	12,6%	9,9%	4,5%	15,2%	5,0%	7,8%	4,8%	5,8%	1,4%	3,8%	7,9%
1985	7,1%	30,7%	7,5%	4,2%	13,6%	10,2%	-1,1%	-1,5%	4,6%	2,2%	5,3%	7,2%
1986	5,6%	22,1%	12,2%	4,2%	8,9%	4,7%	1,2%	-8,6%	5,5%	1,7%	4,8%	6,8%
1987	6,6%	25,8%	12,3%	4,8%	11,7%	5,1%	5,4%	7,5%	9,5%	4,7%	4,0%	9,3%
1988	7,3%	22,7%	11,7%	6,7%	11,3%	12,1%	9,9%	3,6%	13,3%	5,9%	9,6%	8,2%
1989	10,6%	13,5%	6,8%	5,7%	4,2%	8,6%	9,1%	4,5%	12,2%	6,1%	5,9%	8,4%
1990	3,7%	22,5%	9,3%	10,4%	3,9%	5,7%	9,0%	3,8%	11,2%	5,8%	5,5%	10,7%
1991	8,0%	22,4%	9,7%	10,2%	9,3%	6,7%	9,5%	3,6%	8,6%	5,7%	1,1%	13,8%
1992	12,3%	12,9%	5,8%	7,9%	14,3%	8,2%	8,9%	2,4%	8,1%	4,5%	5,5%	9,0%
1993	7,0%	11,8%	6,3%	6,4%	13,9%	15,2%	9,9%	4,0%	8,3%	6,5%	4,8%	9,9%
1994	5,7%	13,7%	8,8%	7,7%	13,1%	20,6%	9,2%	3,9%	8,0%	4,7%	6,7%	10,0%
1995	10,6%	10,4%	8,9%	7,5%	11,0%	13,7%	9,8%	3,6%	8,1%	5,7%	7,6%	9,1%

The commitment for One Community, maximum growth with social inclusion

It is important to think about wealth creation and social inclusion to strengthen our community. Our neighbors need to have better jobs to improve their productivity and income. Job maximization is fundamental, and for this process to work, the costs need to be lower than the revenues to generate profits that attract the investments.

It is good to have internal competition, with businessmen competing for the local labor. It is not good to have unfair foreign competition against countries that have much higher productivity than ours. This type of unfair competition prevent our neighbors from improving themselves, training local labor.

We need an approach where we see everybody in the same room and think about the consequences on everybody when we consider government policies. The goal is to maximize total wealth for the country with reasonable income distribution.

High interest rates protect the financial sector and destroy value in all the other sectors as well as government budget. High currency protects imports against local jobs. These two policies are not of our direct interest at all.

Policies with the goal of maximum employment and growth are the best ones for wealth creation and income distribution. If labor becomes the scarce resource, salaries increase more than inflation and the activities with higher value will always pay more and train more the workers.

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