



Crescimento da Economia Brasileira (1945-2021)

José Luis Oreiro

Professor do Departamento de
Economia da Universidade de Brasília
Pesquisador Nível I do CNPq

Taxa de Crescimento Real do PIB Brasileiro, Média Movel Decenal, 1930-2021

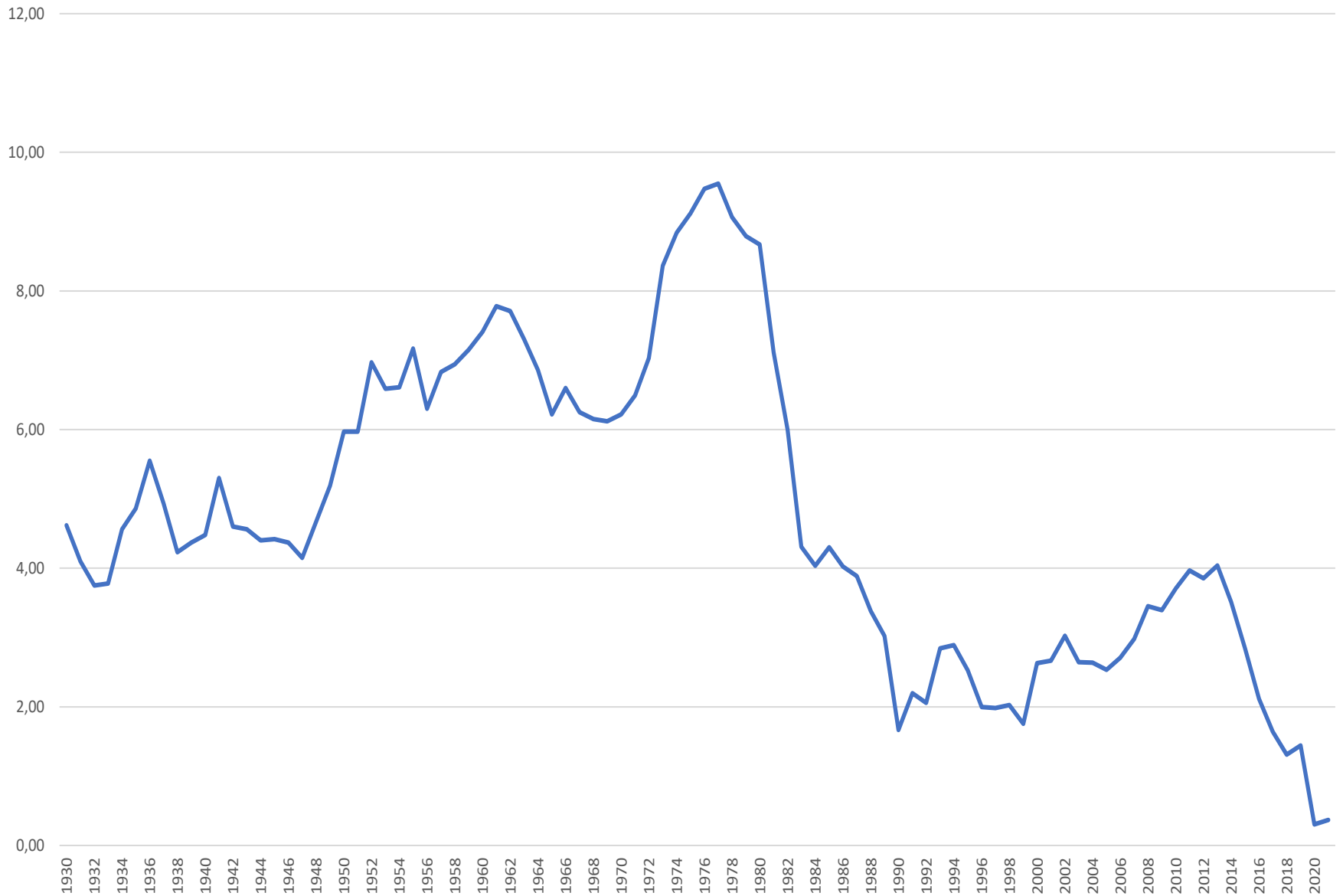


Gráfico 1
Evolução de Longo Prazo da Pobreza no Brasil
Proporção de Pobres, 1970-2011

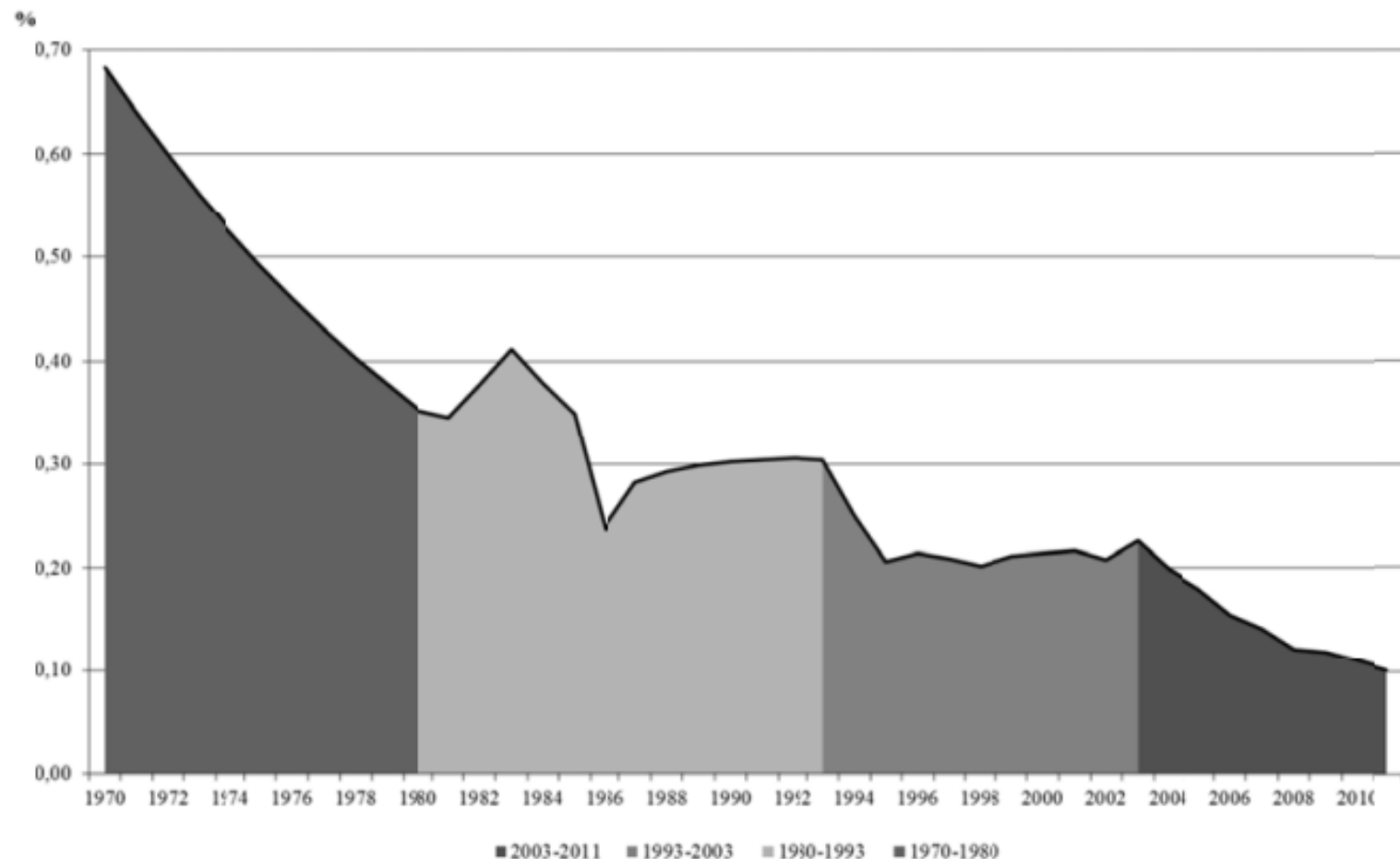
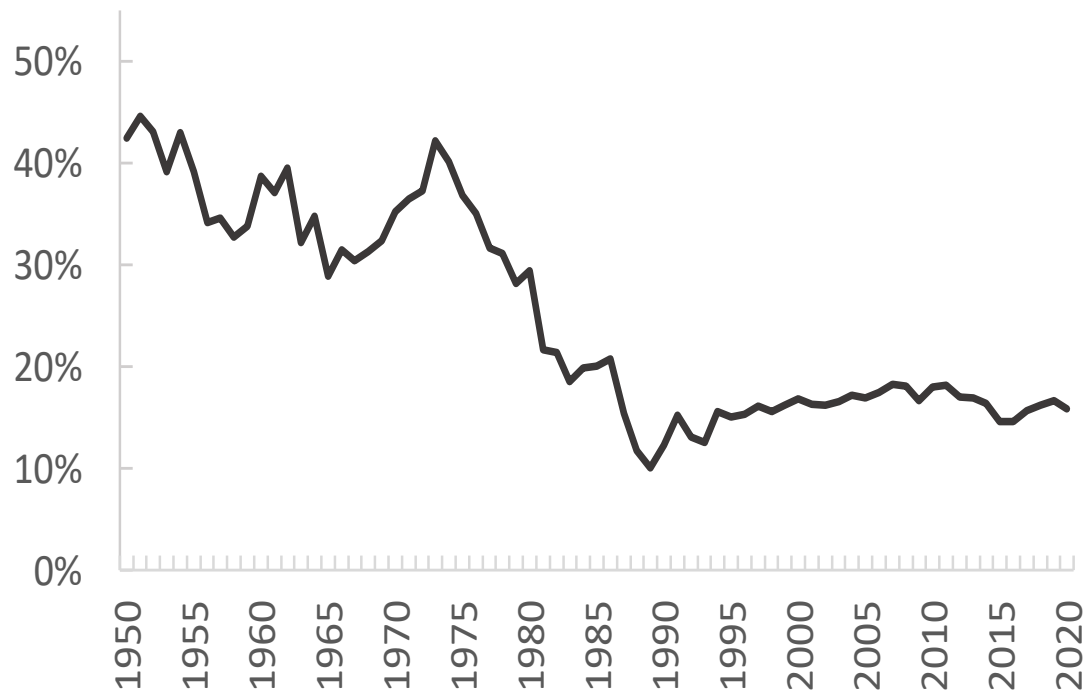


Table 1: The growth rate of GDP and economic sectors in Brazil, 1950-2020

	GDP	Agriculture	Industry	Services
1950-2020	4.4%	3.6%	4.3%	4.5%
1950-1980	7.4%	4.3%	8.9%	7.6%
1950-1973	7.5%	5.4%	12.1%	9.6%
1973-1980	7.0%	4.8%	7.2%	7.9%
1980-2020	2.3%	3.1%	0.9%	2.3%
1980-1989	2.7%	3.2%	1.2%	3.1%
1989-2002	2.4%	3.2%	0.8%	2.0%
2002-2014	3.5%	3.4%	2.6%	3.5%
2014-2020	-1.1%	2.5%	-2.4%	-0.9%

Figure 1: The profit rate in Brazil, 1950-2020.



Source: Marquetti et al. (2022)

Table 2: Decomposition of the profit rate in Brazil: 1950-2020

	r	ρ	π	U
1950-2020	-1.40%	-1.11%	-0.05%	-0.235%
1950-1980	-1.20%	-1.72%	0.61%	-0.096%
1950-1973	-0.02%	-1.40%	1.32%	0.056%
1973-1980	-5.05%	-3.72%	-0.78%	-0.556%
1980-2020	-1.54%	-0.65%	-0.54%	-0.339%
1980-1989	-11.59%	-6.88%	-4.37%	-0.342%
1989-2002	3.70%	1.60%	2.06%	0.033%
2002-2007	2.39%	1.67%	-0.14%	0.870%
2007-2014	-2.08%	0.81%	-2.09%	-0.800%
2014-2020	-0.50%	0.84%	0.52%	-1.860%

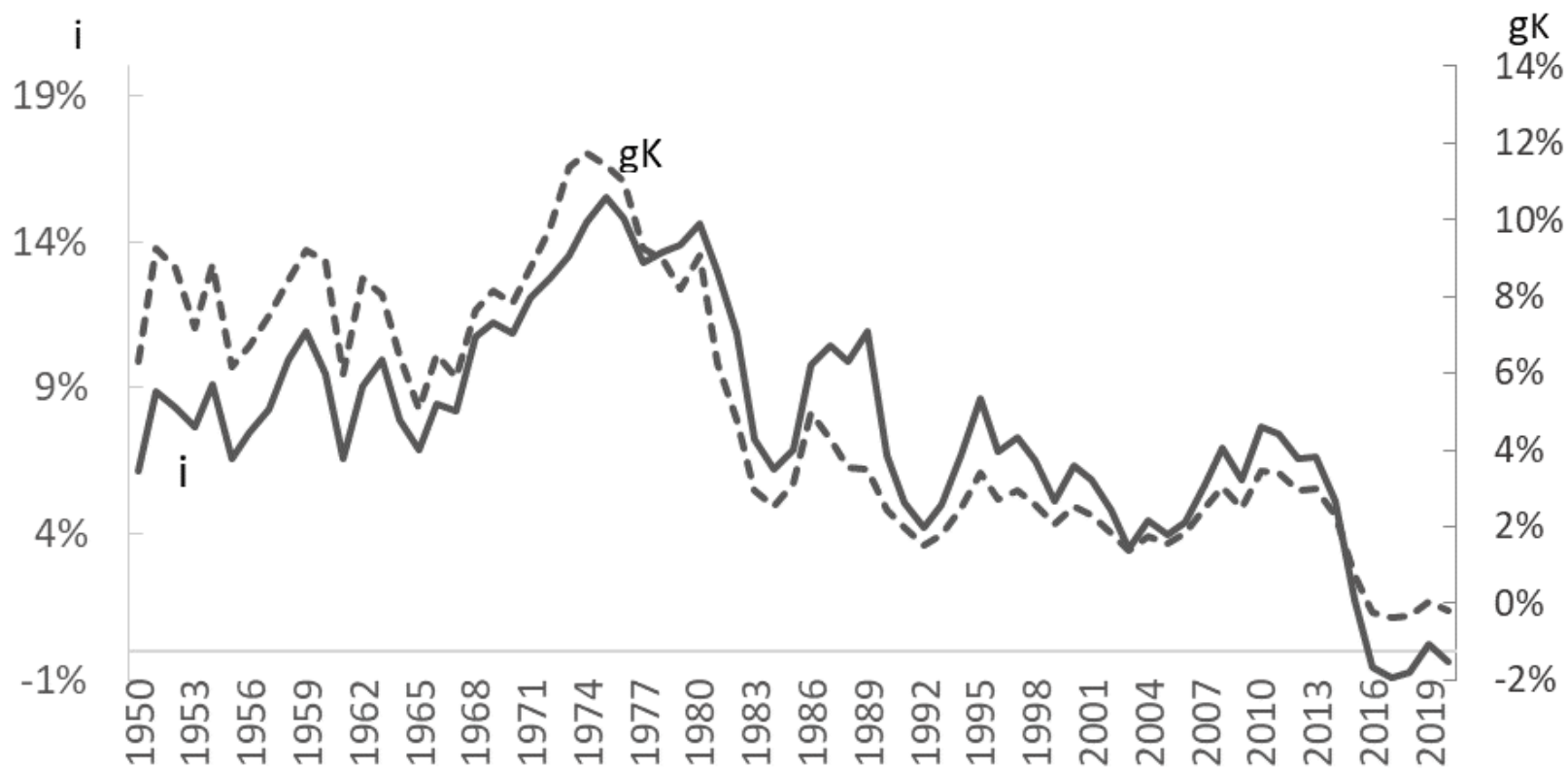
Source: Marquetti et al. (2022)

Figure 2: Profit rate and net capital accumulation rate in Brazil: 1950-2020



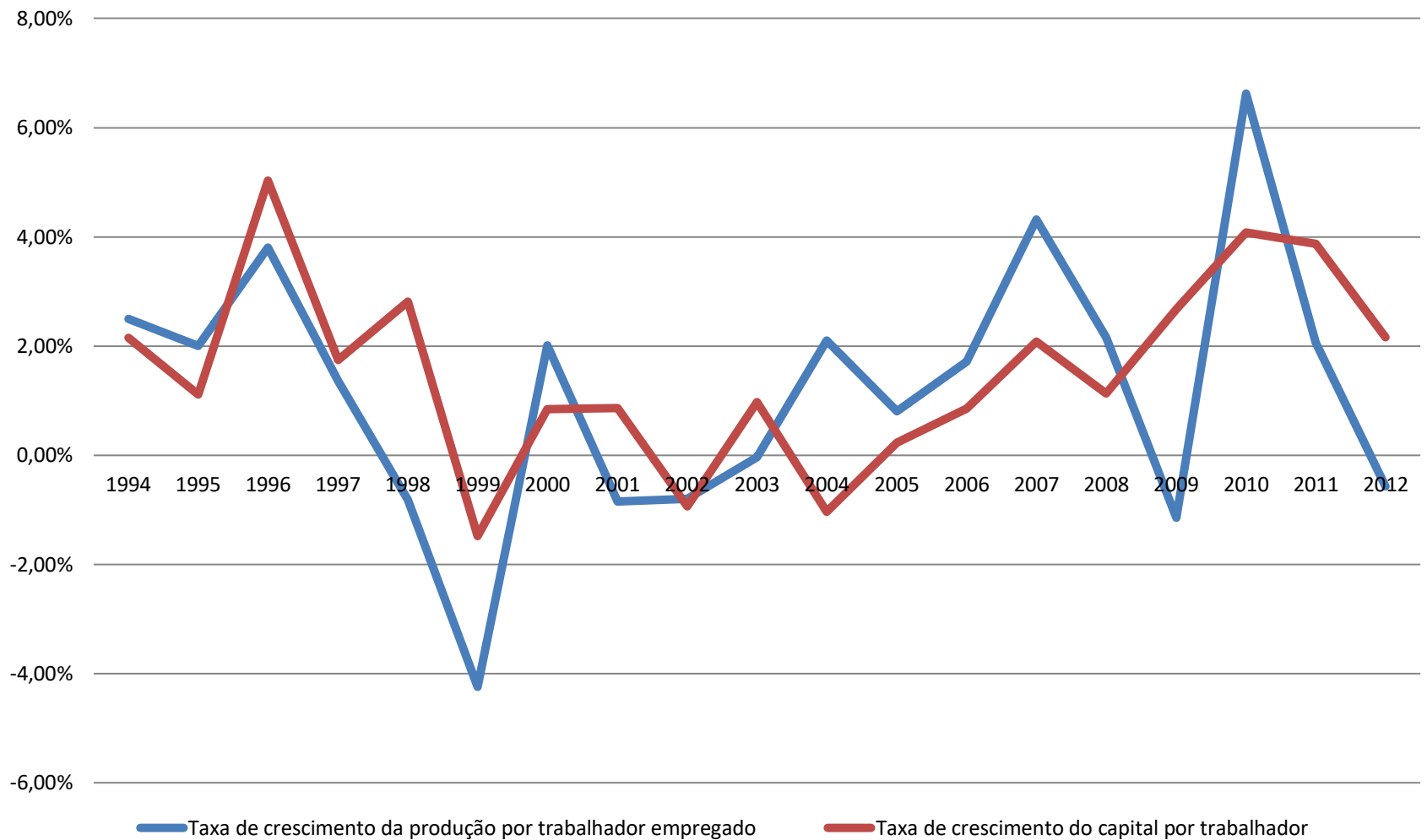
Source: Marquetti et al. (2022)

Figure 3: Capital accumulation and investment rate in Brazil: 1950-2020



Source: Marquetti et al. (2022)

Evolução da Taxa de Crescimento do Produto por Trabalhador e do Estoque de Capital por Trabalhador no Brasil (1994-2012)



Progresso Técnico e Acumulação de Capital no Brasil (1994-2012)

Período	Taxa de crescimento do produto por trabalhador	Taxa de crescimento do estoque de capital	Taxa de crescimento da população ocupada	Taxa de crescimento do capital por trabalhador	Taxa Natural de Crescimento
1994-2012	1,21%	3,40%	1,86%	1,53%	3,07%
1994-2002	0,55%	3,36%	2,01%	1,35%	2,56%
2003-2012	1,80%	3,46%	1,73%	1,70%	3,53%

Desaceleração do ritmo de acumulação de capital no Brasil

Período	Taxa de Crescimento do Estoque de Capital	Taxa de Investimento a Preços Correntes	Preço Relativo dos Bens de Capital	Produtividade do Capital
1980-1984	7,68%	21,26%	1,11	0,72
1985-1989	6,93%	22,93%	1,30	0,63
1990-1994	4,28%	20,35%	1,33	0,63
1995-1999	3,43%	17,19%	1,08	0,57
2000-2004	2,62%	17,04%	1,17	0,57
2005-2009	3,34%	17,81%	1,17	0,58
2010-2012	4,33%	19,13%	1,10	N.A
Var% 1980-2012	-43,53%	-10,42%	+1,53%	-19,93%



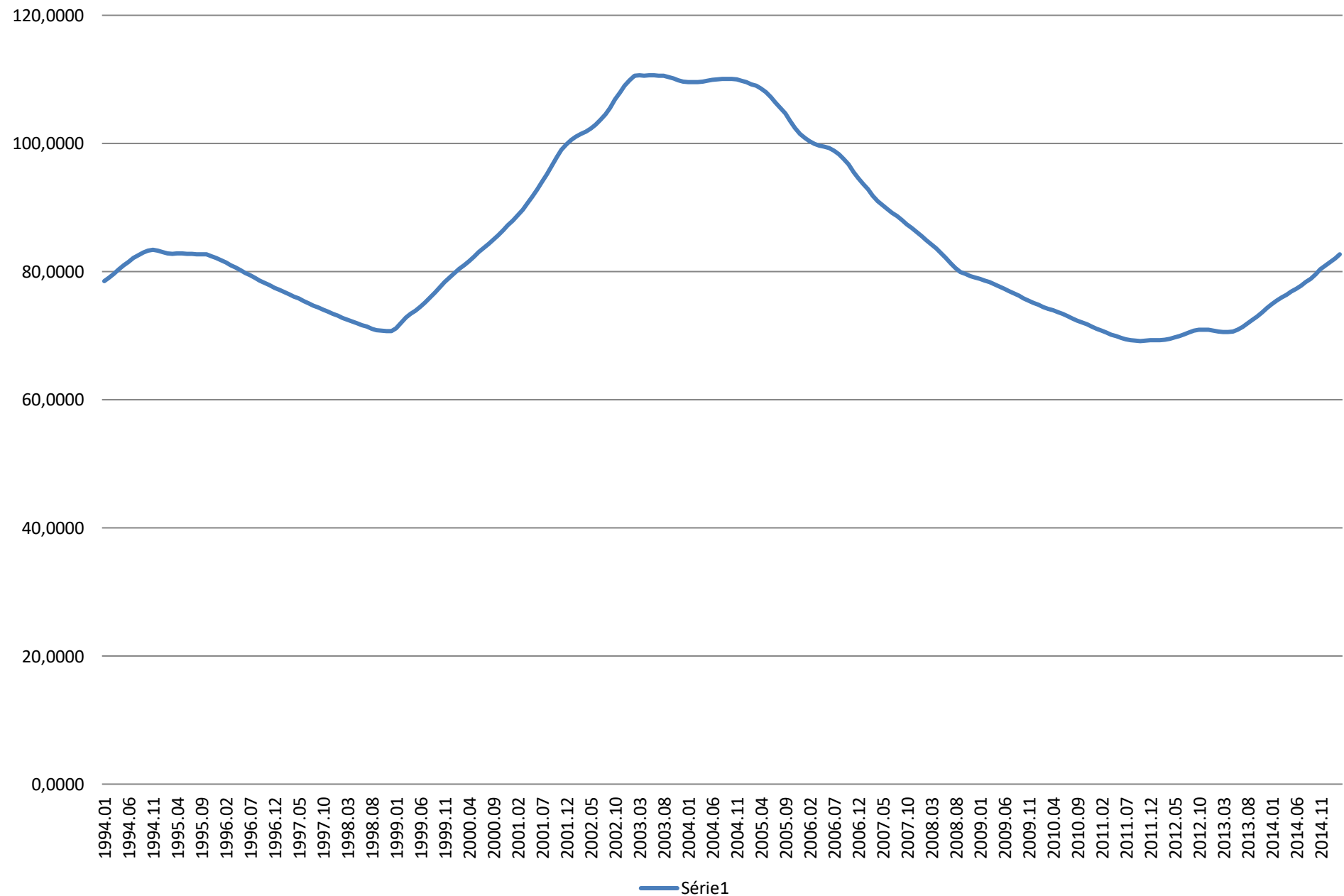
Quais motivos levaram a queda da taxa de investimento?

- A literatura teórica aponta para as seguintes variáveis como determinantes do investimento:
 - Grau de utilização da capacidade produtiva (efeito acelerador)
 - Participação dos lucros na renda (efeito lucratividade)
 - Taxa real de câmbio (efeito competitividade externa).
 - Taxa real de juros (efeito custo do capital).

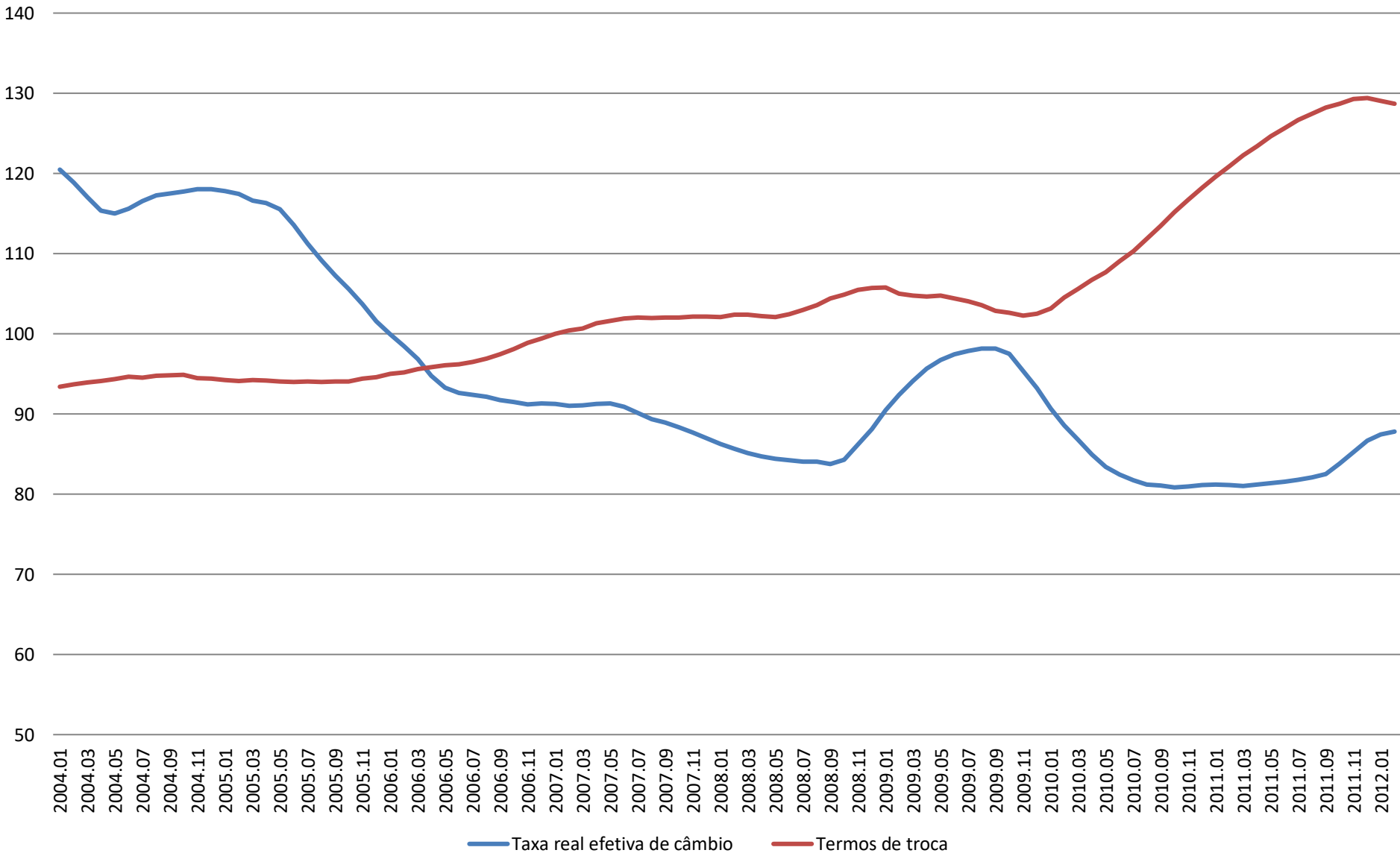
Prendam os suspeitos de sempre ...

Período	Taxa de Investimento a preços correntes	Grau de Utilização da Capacidade Produtiva	Taxa Real Efetiva de Câmbio	Taxa Real de Juros (Ex-post)
1980-1984	21,36%	76,9%	102,5	0,03%
1984-1989	22,93%	80,2%	105,9	-4,7%
1990-1994	20,35%	75,4%	88,4	0,2%
1995-1999	17,19%	81,88%	86,2	20,38%
2000-2004	17,04%	80,8%	123,16	9,31%
2005-2009	17,81%	83,4%	88,5	8,58%
2010-2012	19,13%	86,2%	79,54	3,6%
Var% 1980-2012	-10,42%	+9,53%	-22,44%	+10.500%

Taxa Real Efetiva de Câmbio - Manufaturados - Exportações. Média Móvel dos últimos 5 anos (Jan.1994 - Mar.2015)



Taxa real efetiva de câmbio e termos de troca da economia brasileira (2004/01-2012/01)

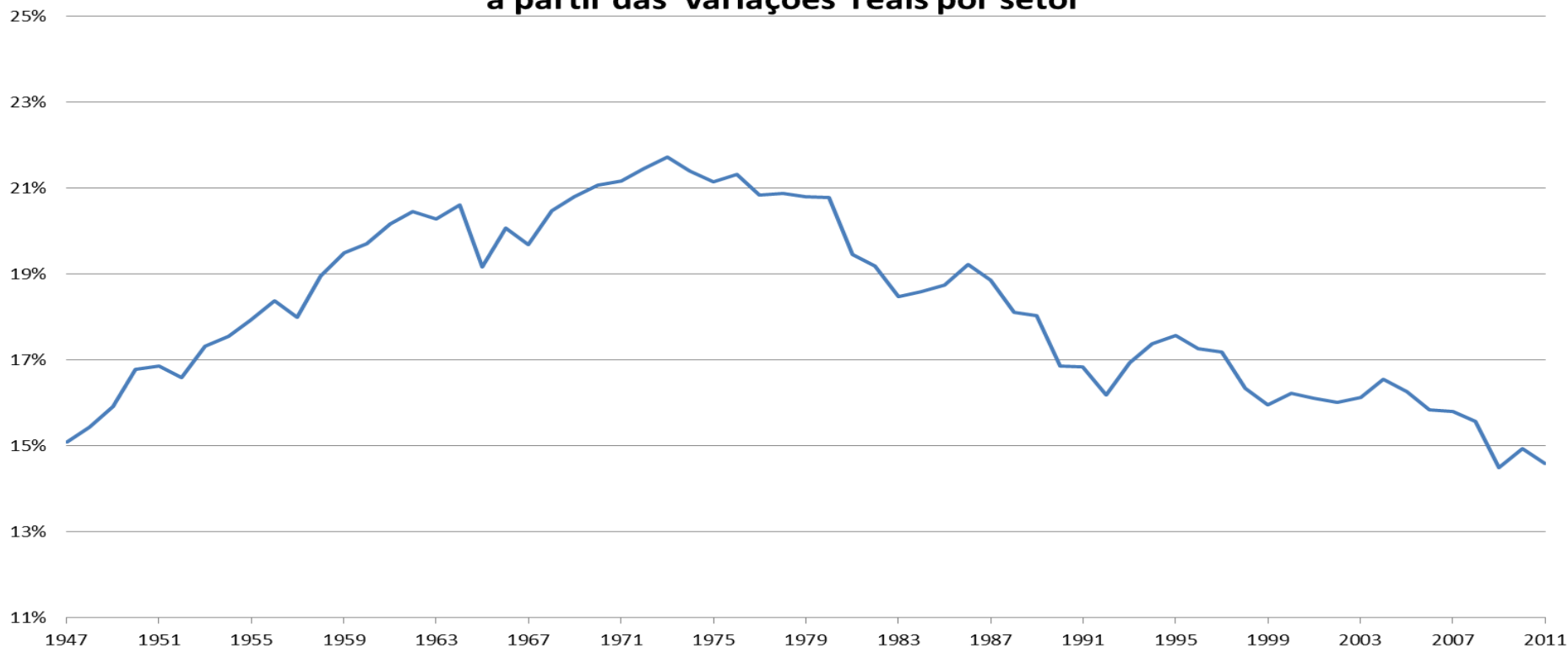


Fonte : IPEADATA, Elaboração própria

A Evolução da Estrutura Produtiva do Brasil (1947-2011)

**Participação da indústria de transformação no valor adicionado
a preços constantes de 2011**

**Fonte: IPEADATA, com cálculos do autor,
a partir das variações reais por setor**



Fonte : Marconi e Rocha (2011)

Manufacturing, value added (% of GDP) - Brazil

World Bank national accounts data, and OECD National Accounts data files.

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Table I –Variables and data sources

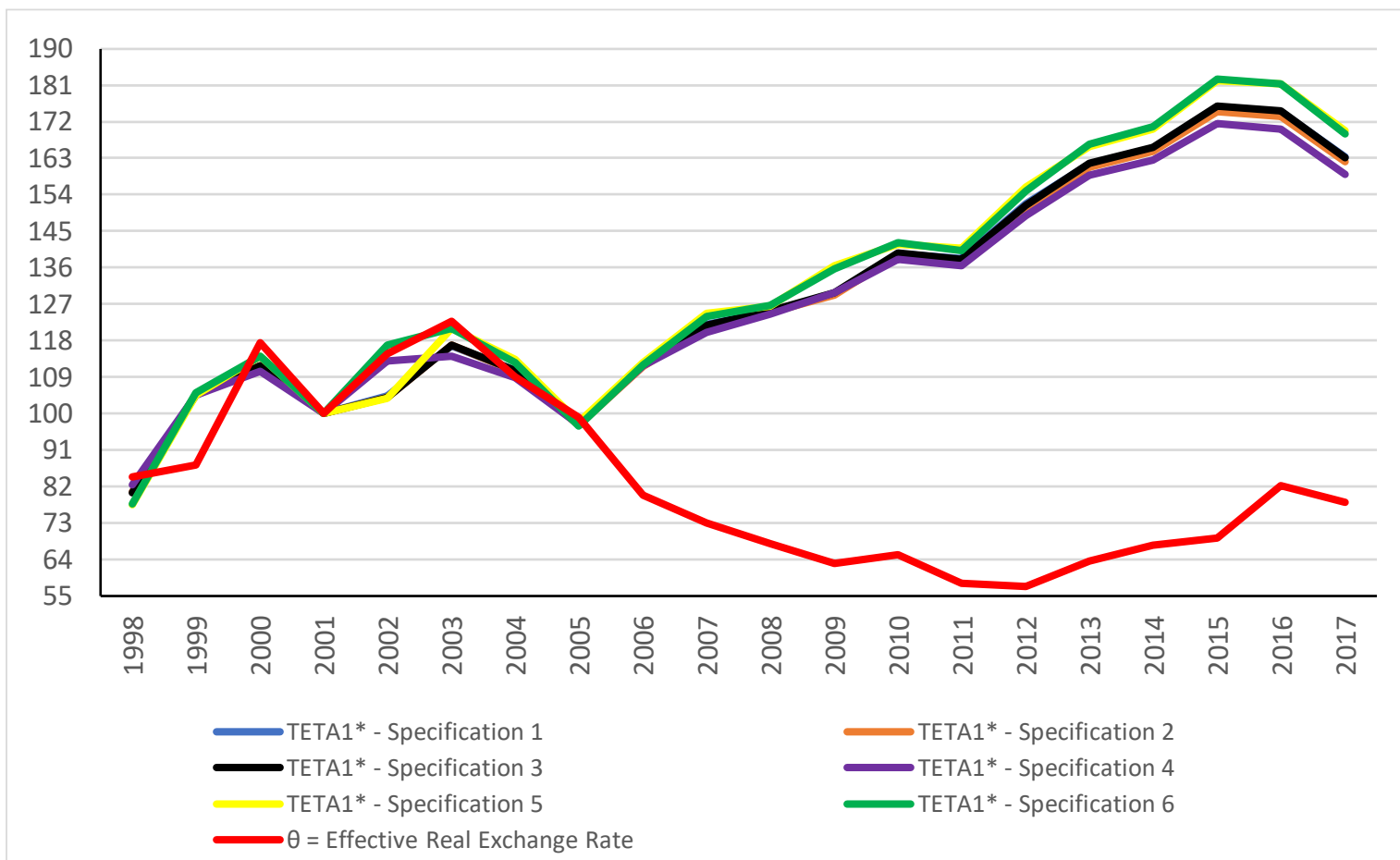
	Description	Format	Data source
<i>h</i>	Share of the manufacturing industry in the Gross Domestic Product (GDP)	%	Brazilian Institute of Geography and Statistics (IBGE)
<i>ICE</i>	Economic Complexity Index	Index	Atlas of Complexity, The Growth Lab at Harvard University
θ	Effective Real Exchange Rate – Broad Wholesale Producer Price Index - Global Supply - exports - manufactured goods - index (2010 = 100), average value of the year. The annual observation was calculated by 12-month average.	Index	Institute of Applied Economic Research (IPEA)
<i>RPC</i>	Real per capita income constant (2010), calculated by the ratio of the gross domestic product at market price to the size of the population, using the gross domestic product implicit deflator	Real Brazilian Currency	Brazilian Institute of Geography and Statistics (IBGE)

Source: Elaboration of the authors.

$$\theta_t^* = \frac{\beta_4(RPC_{t-h})^2 - [\beta_1 ICE_{t-h} + \beta_3 RPC_{t-h}]}{\beta_0} \quad (9)$$

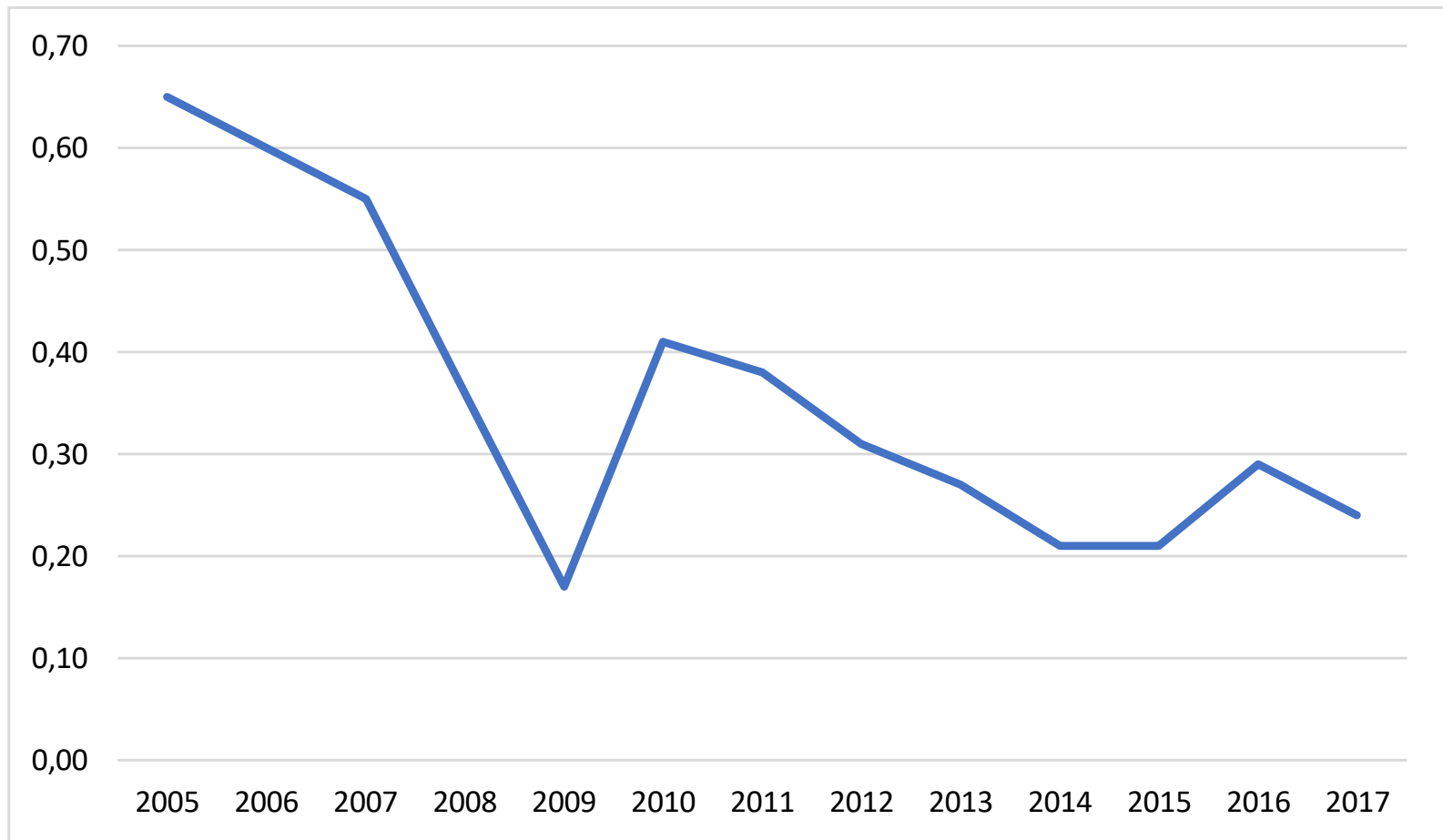
$$h_t = h_{t-1} + \beta_0 \theta_{t-j} + \beta_1 ICE_{t-j} + \beta_3 RPC_{t-j} - \beta_4 (RPC_{t-j})^2 \quad (8)$$

Figure 3 – Time series for the industrial equilibrium real exchange rate, specifications 1 to 6, during 1998-2017 compared with the real effective exchange rate, base 100 = 2001.



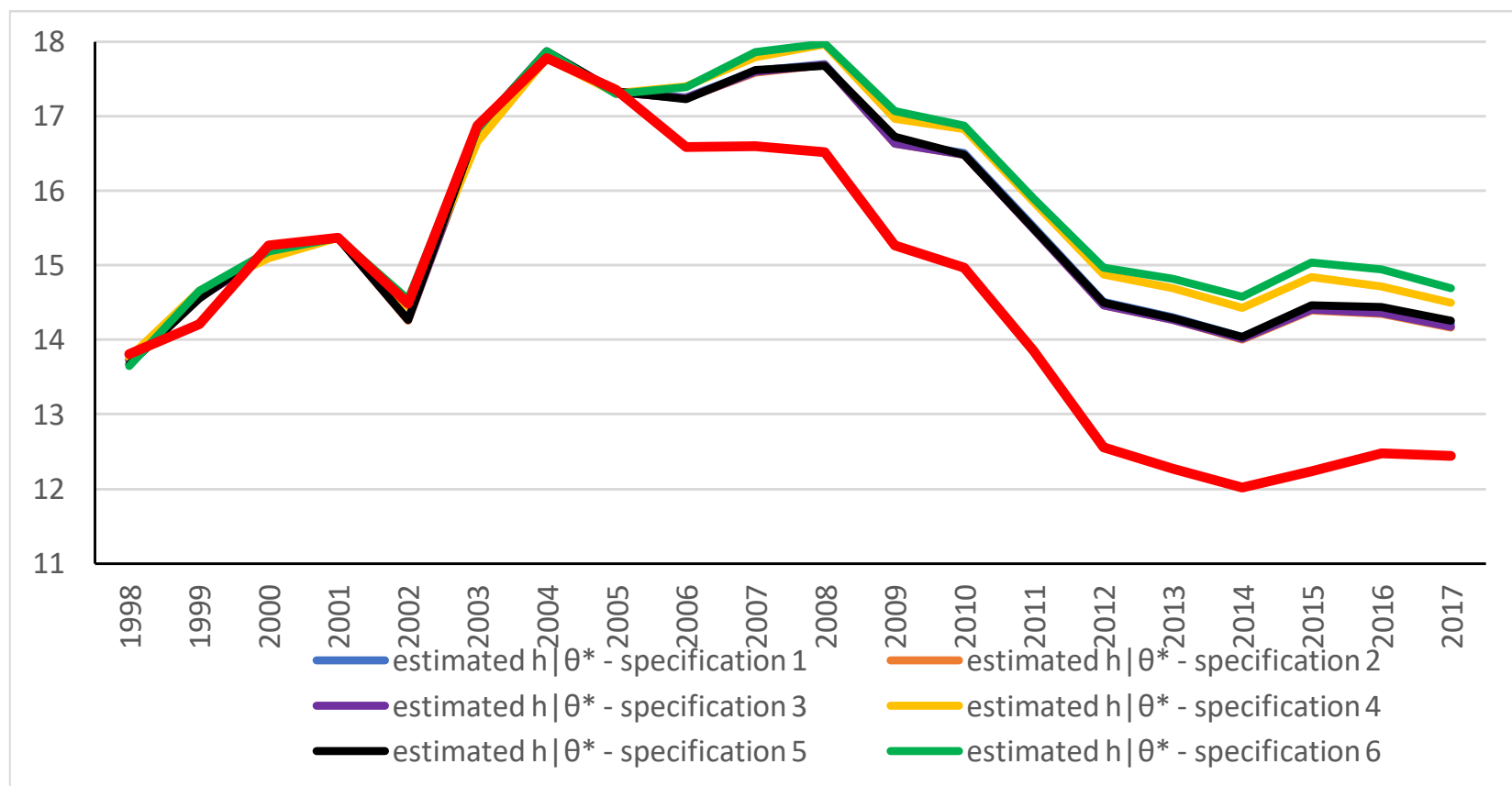
Source: Elaboration of the authors

Figure 4 – Evolution of the Economic Complexity Index, Brazil (2005-2017)



Source: Elaboration of the authors.

Figure 6 – Dynamic estimate of the share of the manufacturing industry in the GDP with the condition of the results estimated of the industrial equilibrium exchange rate between 1998-2017, calculated by specifications 1 to 6, in % of the GDP.



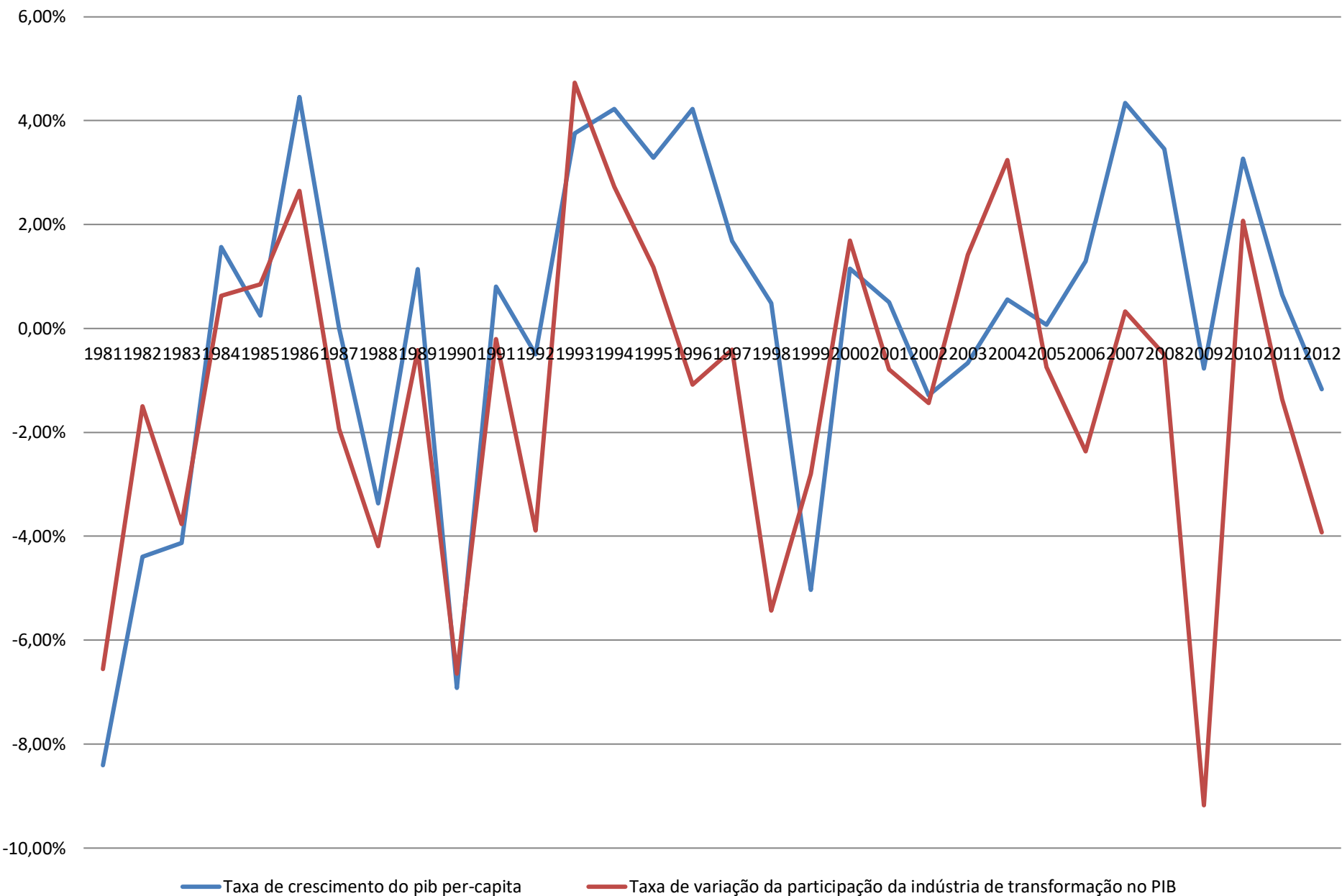
Source: Elaboration of the authors

Table III – Evolution and decomposition of deindustrialization of Brazilian economy (2005-2017)

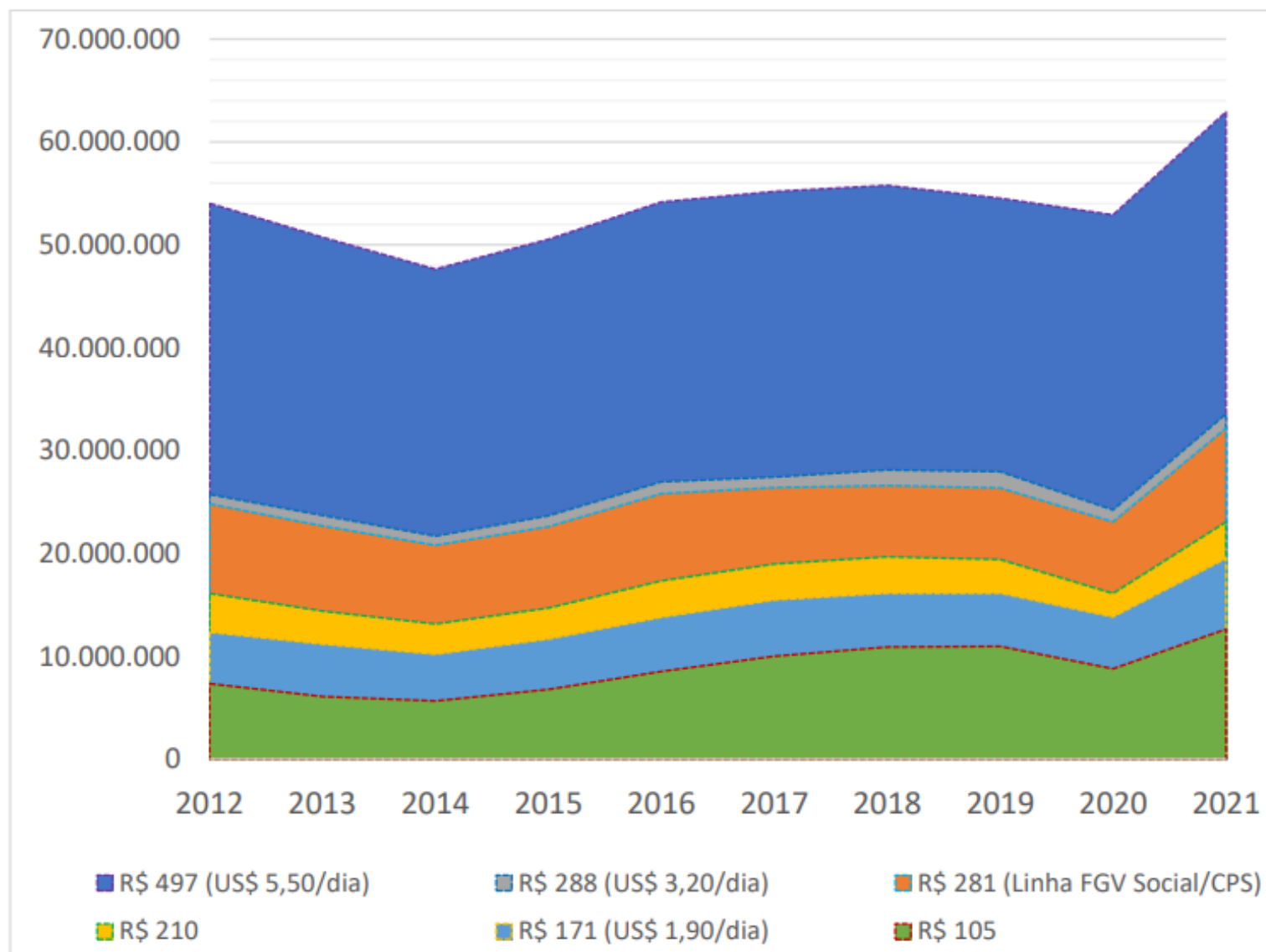
About	2005	2017	2005-2017
Actual share of manufacturing industry	17,32%	12,44%	-4,88 b.p
Estimated share of manufacturing industry at Industrial Equilibrium exchange rate	17,32%	14,34%	-2,98 b.p
% change of manufacturing share due reduction of non-price competitiveness	-	-	61,06%
% change of manufacturing industry due to exchange rate overvaluation	-	-	38,94%

Source: Author's own elaboration.

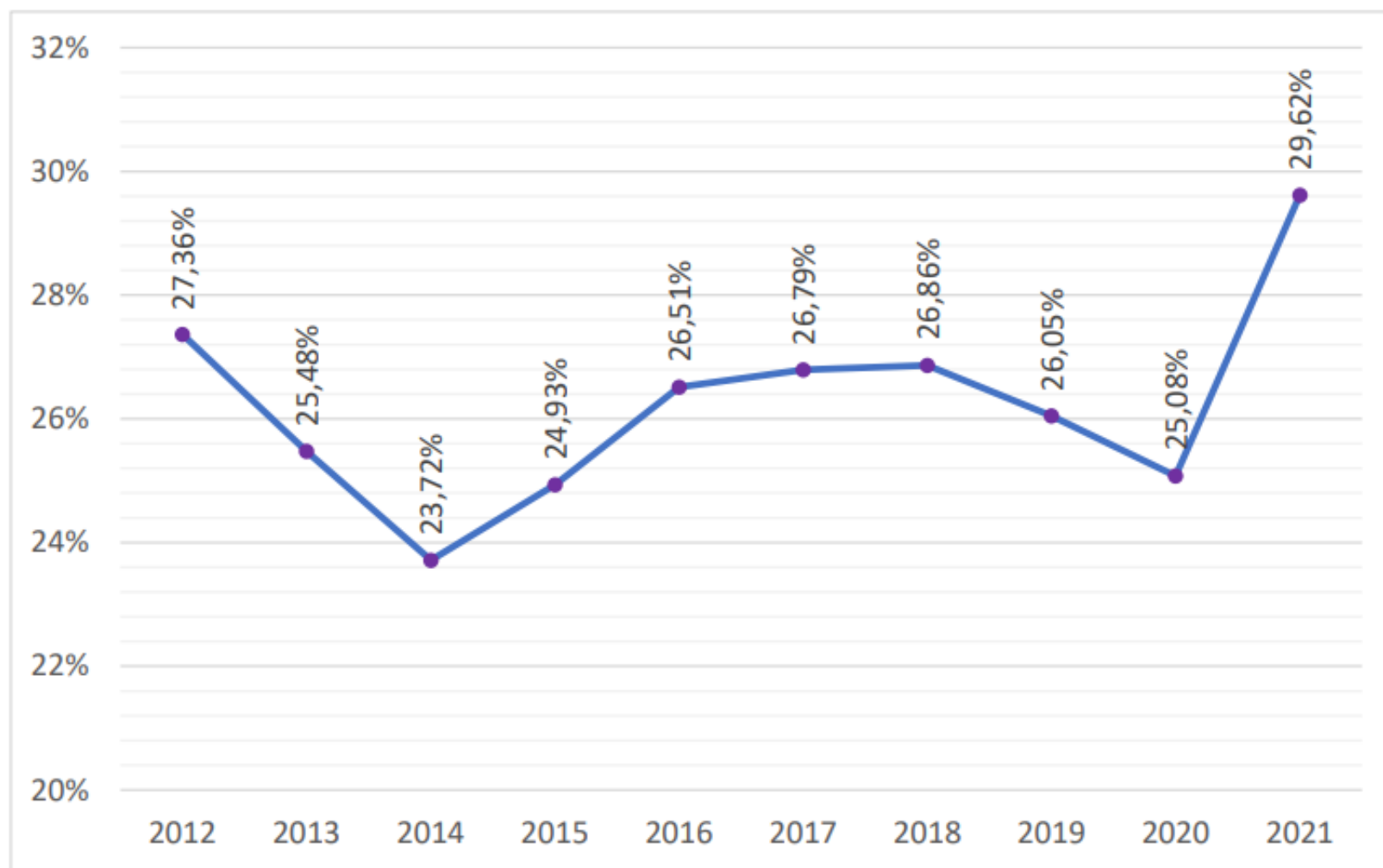
Taxa de Crescimento do PIB Per-Capita e Taxa de Variação da Participação da Indústria de TTransformação no PIB (1981-2012)



População Pobre segundo Linhas de Pobreza*



Proporção de Pobres em 2021 por Unidade da Federação (%) Linha R\$ 497 mensais*



Fonte: FGV Social a partir dos microdados da PNADC. *A preços do último trimestre de 2021

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