

Exploring Growth Regimes and Growth Drivers in Spain:

An empirical approach.

Demand and Growth Regimes:
Expanding the Debate Workshop

HWR Berlin

Author:

Daniel Feliciano Cruz (University of the Basque Country).

Funded through a FPU Scholarship by:



Outline

- 1 Alternative macroeconomic configurations of financialised capitalism.
- 2 Objectives and research design of the paper.
- 3 Evolution of the Growth Regime in Spain.
- 4 Drivers of non-financial companies' spending.
- 5 Drivers of households' spending.
- 6 Conclusion.

What is financialisation?

Understood as "the increasing role of financial motives, financial actors and financial institutions in the operation of [...] economies" (Epstein, 2005; p. 3).

Great number of works about the macroeconomic implications: income distribution, capital accumulation, household consumption and indebtedness, etc.

Debate about the alternative macroeconomic configurations or typologies of financialised capitalism.

The enduring controversy: the two approaches.

Growth regimes

- Financialisation affects macroeconomics through different channels:
 - Regressive redistribution,
 - Drop of productive investment,
 - Growing role of debt-financed consumption and liberalisation of capital markets.
- The country-specific stances of these elements give rise to different growth regimes.
- Regimes analysed by the growth contributions of each demand component and the financial balances of institutional sectors (Hein, 2019; Hein & Martschin, 2021; Akcay et al., 2022).

VS

Table 1. Synthesis of the literature on demand-led growth regimes for European economies before and after the financial crisis of 2008.

| | | Post-financial crisis period. | | | |
|---|--------------------------------|--------------------------------------|----------------------------|--|--|
| | | <i>Debt-led private demand</i> | <i>Domestic demand-led</i> | <i>Weakly export-led</i> | <i>Export-led mercantilist</i> |
| Economic expansion previous to the financial crisis. | <i>Debt-led private demand</i> | | UK (H, Hea) | Greece (Hea, H/M) Portugal (Hea) Slovakia (Hea) Spain (Hea) | Estonia (D/H, Hea) Hungary (Hea) Ireland (Hea, H/M) Latvia (D/H) Spain (H, H/M) |
| | <i>Domestic demand-led</i> | | France (H, Hea, H/M) | Italy (Dea, Hea) Poland (Dea, Hea) Portugal (Dea, H/M) | EA-12 (H, H/M) Italy (H/M) |
| | <i>Weakly export-led</i> | | | Czech Rep. (Hea) Iceland (Hea) Norway (Hea) | Denmark (D/H, Hea) Slovenia (Hea) |
| | <i>Export-led mercantilist</i> | | Finland (Hea, H/M) | Austria (Hea) Belgium (H/M) Sweden (H, Hea) | Austria (H/M) Belgium (Hea) Germany (H, Hea, H/M) Luxembourg (Hea) Netherlands (Hea, H/M) Switzerland (Hea) |

Note: Information extracted from: H, Hein (2019); D/H: Dühaupt & Hein (2019); Hea: Hein et al. (2021); H/M: Hein and Martschin (2021). Source: Authors' re-elaboration of the table originally presented by Hein et al. (2022) to focus on European economies.

The enduring controversy: the two approaches.

Growth regimes

- Financialisation affects macroeconomics through different channels:
 - Regressive redistribution,
 - Drop of productive investment,
 - Growing role of debt-financed consumption and liberalisation of capital markets.
- The country-specific stances of these elements give rise to different growth regimes.
- Regimes analysed by the growth contributions of each demand component and the financial balances of institutional sectors (Hein, 2019; Hein & Martschin, 2021; Akcay et al., 2022).

VS

Growth drivers

- Growth regimes approach questioned to analyze the period after the Great Recession.
- Misleading results due to cyclical factors.
- Growth drivers: Factors that are not parts of the aggregate demand but influence the growth of its components.
- On which the growth regimes rely on.
- Different typologies of growth drivers: financial cycles, discretionary fiscal policy, price, and non-price competitiveness, etc. (Stockhammer, 2022; Kohler & Stockhammer, 2022; Stockhammer & Novas Otero, 2022).

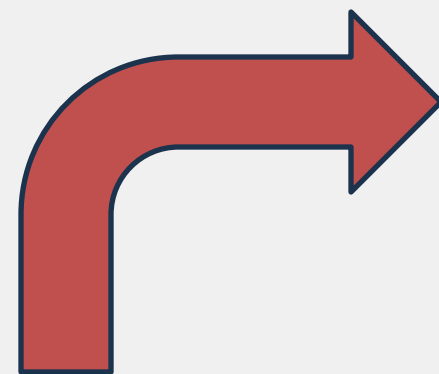
The enduring controversy: a synthesis?

Hein (2023) recently comments that “the national income and financial accounting (...) and the different lenses of looking at growth drivers, in principle, are not mutually exclusive or even contradictive, but that they rather complement each other” (p. 433)

Jungmann’s (2023) advocates “for the synthesis of growth decomposition and growth driver analysis because both approaches have their merits and inform each other” (p. 353).

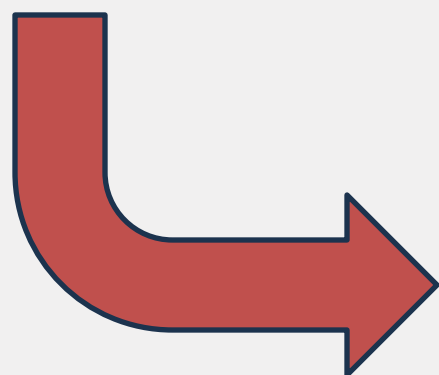
The aim of the paper is:

To give support to the idea that both perspectives have the potential to enrich each other.



1 – Theoretically.

To develop a coherent framework to understand the financialised economy, integrating its implications for the interplay between growth drivers and growth regimes



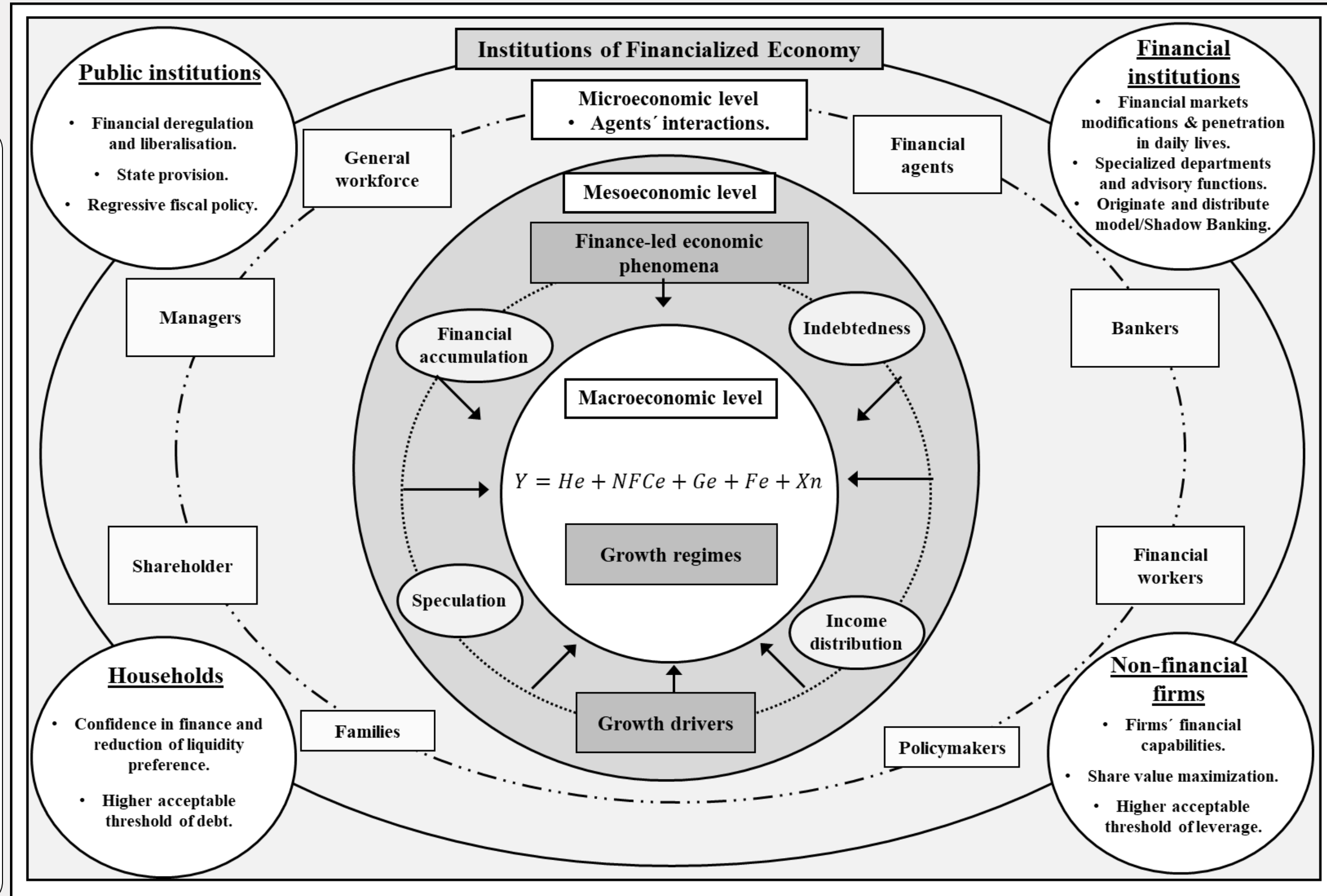
2 – Empirical analysis.

Giving empirical support to this perspective through analysis of the evolution of the Spanish growth regime through the lens of growth drivers.

A financialised economy: clarifying terminology.

- Financialization: alteration of the institutional framework that shapes the interactions among economic agents.
- These changes shape the development of economic processes with significant influence on demand components: **growth drivers**. Country-specific stances of each economy determine distinct evolutions.
- **Growth regimes**: alternative models or patterns that economies can adopt to sustain their growth trajectory over specific periods.

Figure 1. Conceptual scheme of the financialized economy.



Research design of the empirical analysis.

We analyse the Spanish economy before (1996-2007), during (2008-2013) and after (2014-2019) the Great Recession in complementary phases, in line with Lambat & Summa (2024).

1- Employing a decomposition approach of national and financial accounts, we identify the growth regime in successive stages of the Spanish economy, and the main components of demand which explain the changes.

2- We focus on studying which potential growth drivers are behind the evolution of the main components of demand leading the change of the Spanish growth regime. .

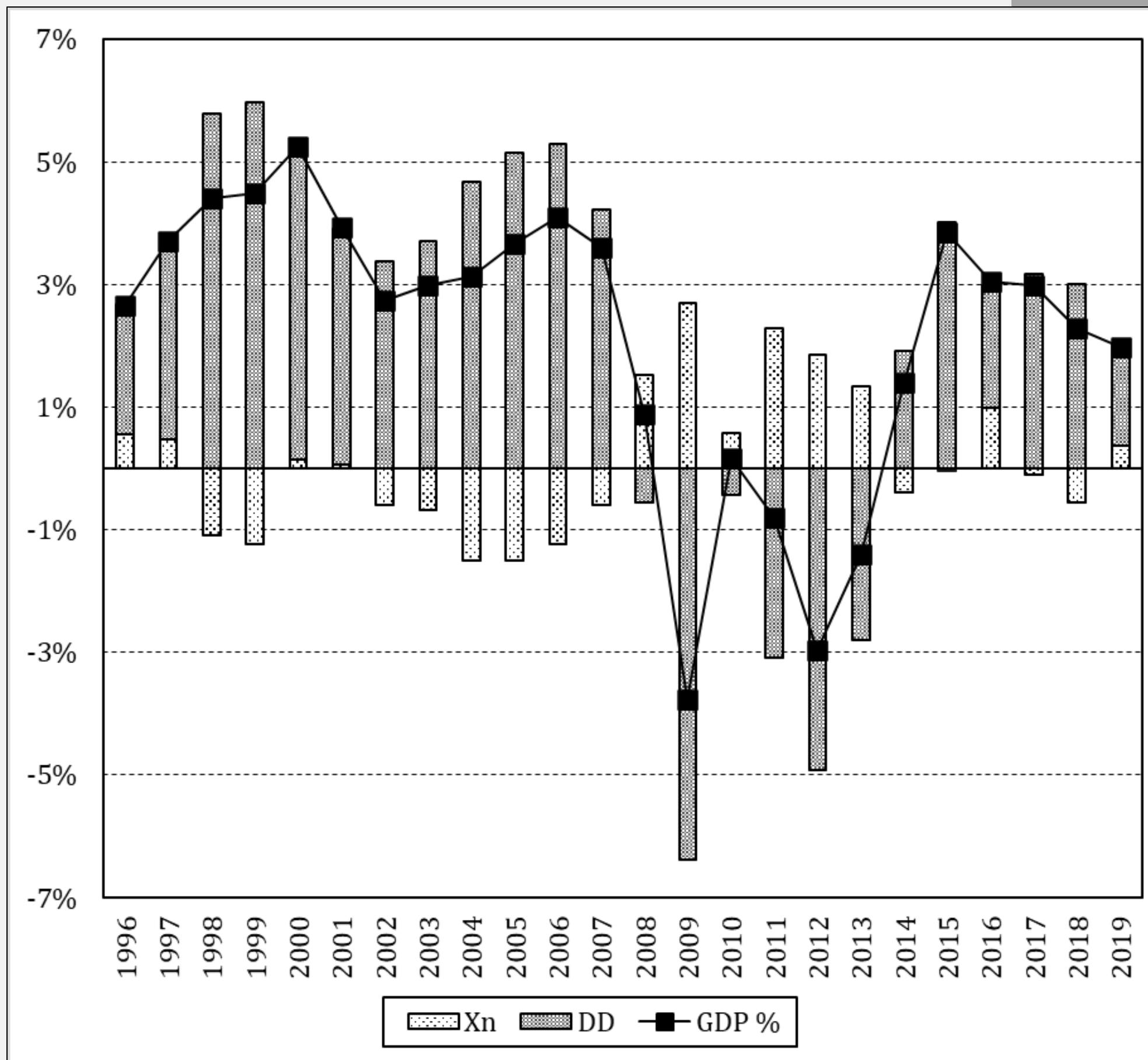
3- We estimate alternative models for each of these demand components, adopting the single equation approach, using as explanatory variables proxies of the studied drivers. Annual data (1995-2019). Source: Eurostat.

4- Once we identify which drivers play a significant role, we analyse their evolutions and contributions to the evolution of each demand component

Domestic demand is the primary engine of the Spanish economy over the whole period (Álvarez et al., 2019; Villanueva et al., 2020).

Figure 2.

Contributions of domestic demand (DD) and net exports (XN) to GDP growth rate.



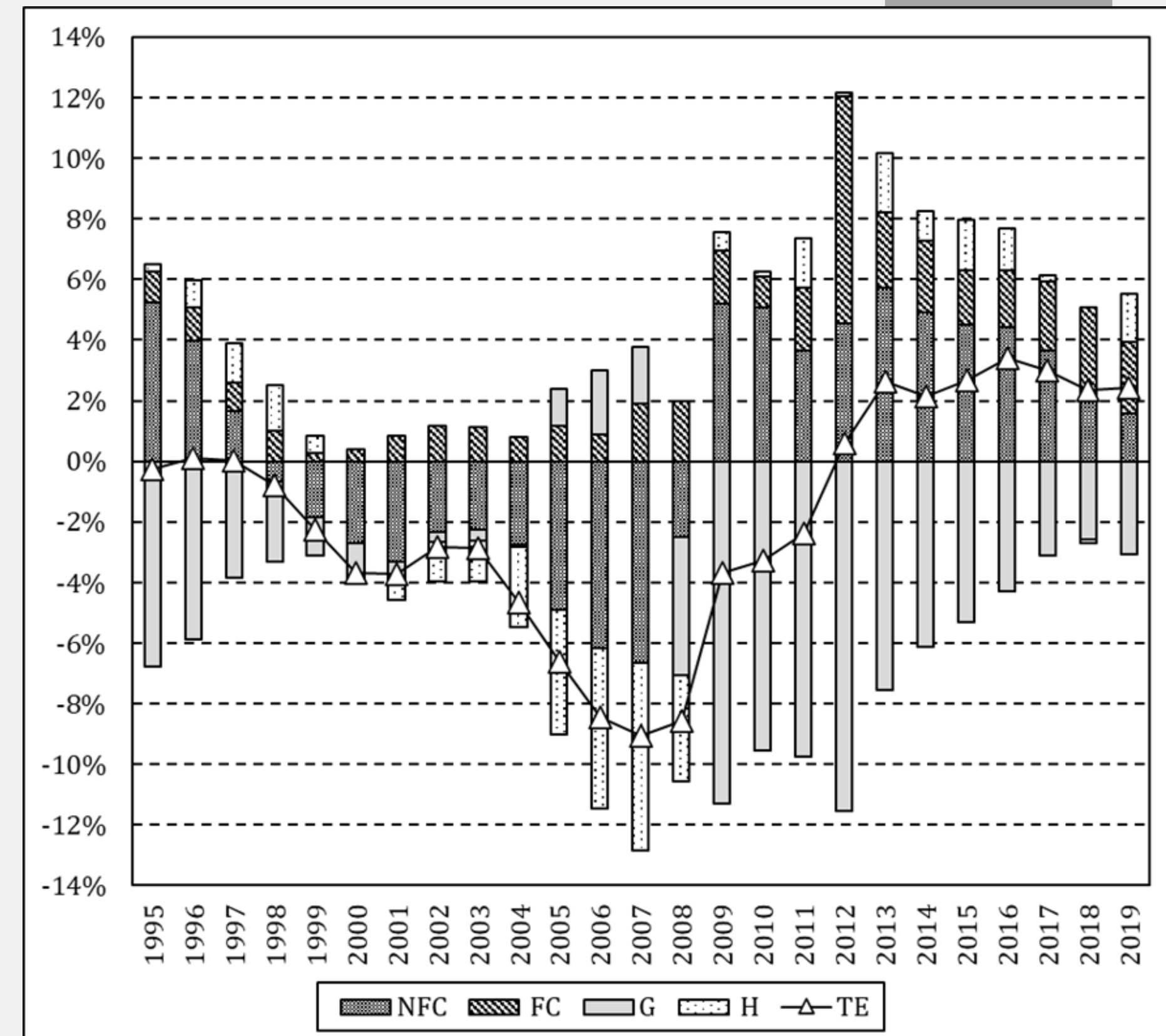
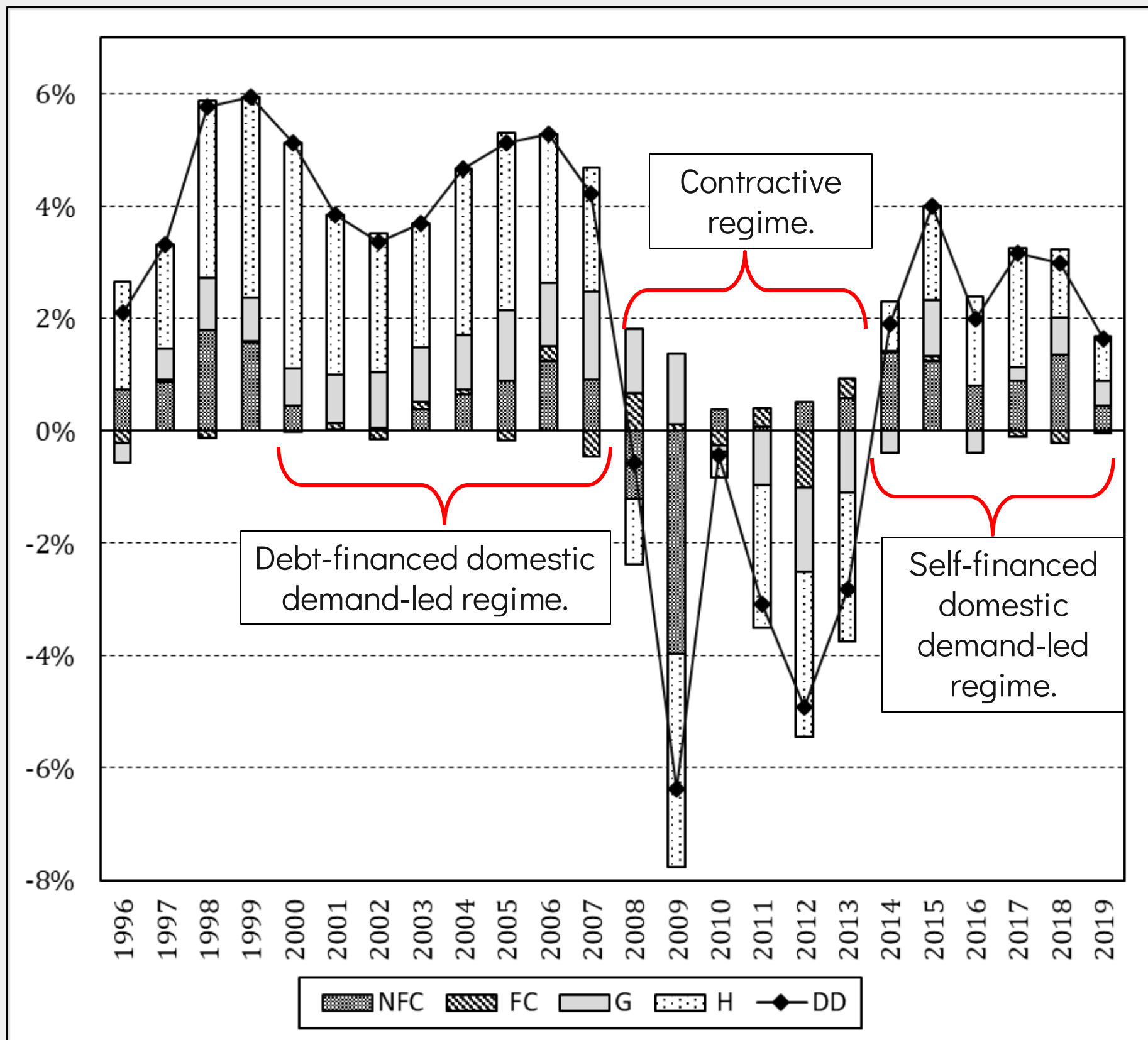


Figure 3. Contributions of households spending (H), non-financial companies spending (NFC), financial companies spending (F) and government spending (G) to GDP growth rate.

Figure 4. Financial balances of of households (H), non-financial companies (NFC), financial companies (F), government (G) and total economy (TE) as proportion of GDP.

Key ideas about the Spanish growth regime:

The study identifies the emergence of three different growth regimes in successive stages of the Spanish economy:

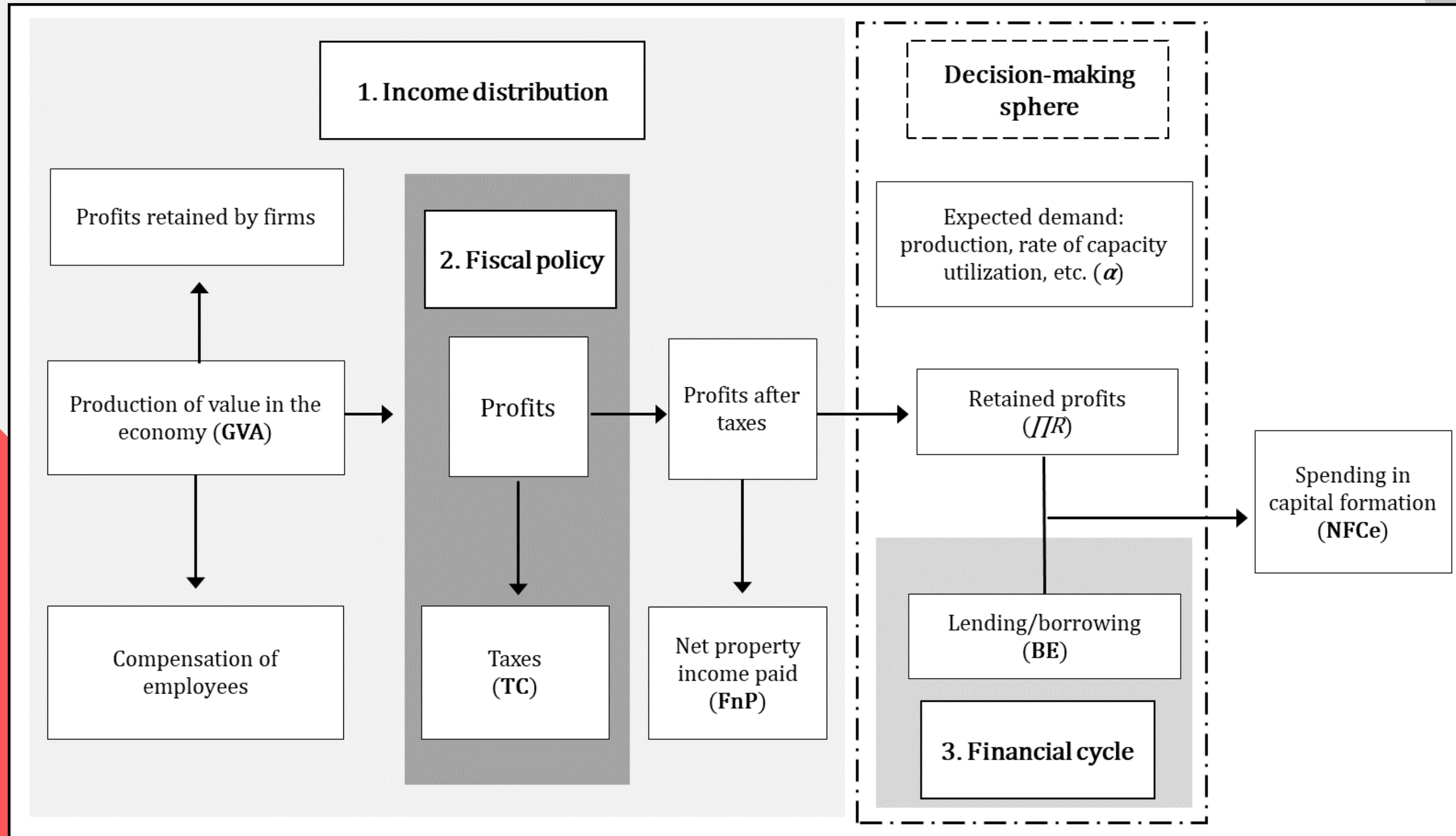
- 1) a debt-financed domestic demand-led regime (**DDR**) in the pre-crisis period.
- 2) a contractive regime (**CR**) during the crisis.
- 3) a self-financed domestic demand-led regime (**SDR**) after the crisis.

Likewise, through this study, we observe that the transformations and changes of the growth regime are mostly explained by non-financial private components of domestic demand:

- A. households' spending.
- B. non-financial companies (NFCs)' spending.

$$NFC_e = f(\alpha, \Pi_R, B_E)$$

Figure 5. Importance of growth drivers in the evolution of NFCs' spending in capital formation.



$$5.1.) d[\log(NFCe)] = x_0 + x_{NFC\ GVA}d[\log(NFC\ GVA)] + x_{PS}d(PS) + x_{FnP}d(FnP) + x_{NFCb}d(NFCb)$$

$$5.2.) d[\log(NFCe)] = x_0 + x_{NFC\ GVA}d[\log(NFC\ GVA)] + x_{PS}d(PS) + x_{FnP}d(FnP) + x_{NFCb}d(NFCb) + x_{CT}d(CT)$$

$$5.3.) d[\log(NFCe)] = x_0 + x_{NFCGVA}d[\log(NFC\ GVA)] + x_{UR}d(UR) + x_{PS}d(PS) + x_{FnP}d(FnP) + x_{NFCb}d(NFCb) + x_{CT}d(CT)$$

Where:

x_0 : the constant term.

NFC GVA : gross value added generated within NFCs as a proxy of expected demand (α).

PS: NFCs' profit share .

Fnp: NFCs' net flow of property income as a percentage of their profits.

CT: the net volume of taxes on income and wealth as percentage of their primary income (*CT*).

NFCb: net lending/borrowing position of NFCs as percentage of GDP.

UR: the rate of capacity utilization of firms .



Table 2. Estimation results for non-financial firms' spending (NFCe).

| | Model A. Eq. (5.1) | Model B. Eq. (5.1) | Model C. Eq. (5.2) | Model D. Eq. (5.2) | Model E. Eq. (6.3) | Model F. Eq. (6.3) |
|-----------------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------------------------|------------------------------------|
| constant | 0.008 (0.4238) | 0.028*** (0.0085) | 0.009 (0.2834) | 0.016** (0.0111) | 0.010 (0.2205) | 0.016** (0.0110) |
| d NFCb _t | -5.049*** (<0.0001) | -3.191*** (<0.0001) | -7.360*** (<0.0001) | -6.849*** (<0.0001) | -6.075*** (<0.0001) VIF (16.94) | -6.002*** (<0.0001) VIF (26.19) |
| dlog NFC GVA _t | 0.7833*** (0.0034) | 1.57313 (0.0002) | 0.593638** (0.0143) | 0.3930** (0.0477) | 0.614471** (0.0137) | 0.4116** (0.0365) |
| d UR _t | | | | | 0.0079*** (0.0040) | 0.0048 (0.1959) |
| d PS _t | 2.3085*** (0.0040) | 1.3779* (0.0836) | 2.9642*** (<0.0001) | 2.6341*** (<0.0001) | 2.8474*** (<0.0001) | 2.5007*** (0.0002) |
| d FnP _t | -0.8524*** (0.0042) | -0.522** (0.0351) | -1.243*** (<0.0001) | -1.218*** (<0.0001) | -1.0932*** (0.0003) | -1.117*** (<0.0001) |
| d CT _t | | | -1.133*** (<0.0001) | -1.018*** (<0.0001) | -0.874*** (<0.0001) | -0.846*** (0.0010) |
| d NFCb _{t-1} | | -0.9496** (0.0182) | | | | |
| dlog NFC GVA _{t-1} | | -1.5584*** (0.0007) | | | | |
| d CT _{t-1} | | | | 0.3880** (0.0131) | | 0.3826** (0.0129) |
| adj. R-squared | 0.862030 | 0.928511 | 0.945949 | 0.969269 | 0.955381 | 0.970789 |
| RESET | 0.00341 | 0.0538322 | 0.0779922 | 0.689538 | 0.0619378 | 0.590528 |
| B. Pagan | 0.0273397 | 0.74826 | 0.0728113 | 0.682419 | 0.0236332 | 0.412093 |
| LM Autocorrel. | 0.435066 | 0.434462 | 0.546 | 0.958748 | 0.685939 | 0.965246 |
| Shapiro test | 0.482117 | 0.915281 | 0.823468 | 0.929946 | 0.421975 | 0.6332 |
| CUSUM test | 0.0691658 | 0.924813 | 0.0898216 | 0.233807 | 0.906024 | 0.308359 |

Financial driver.

Main result

- Results suggest that a growing (falling) borrowing (lending) position in relation to GDP ($d NFCb < 0$) is accompanied by a larger growth of NFCe, while a growing (falling) lending (borrowing) position ($d NFCb < 0$) by a lower expansion of NFCe's.

| | Model A. Eq. (5.1) | Model B. Eq. (5.1) | Model C. Eq. (5.2) | Model D. Eq. (5.2) | Model E. Eq. (6.3) | Model F. Eq. (6.3) |
|----------------|-------------------------|-------------------------|-------------------------|-------------------------|--|--|
| $d NFCb_t$ | $-5.049^{***}(<0.0001)$ | $-3.191^{***}(<0.0001)$ | $-7.360^{***}(<0.0001)$ | $-6.849^{***}(<0.0001)$ | $-6.075^{***}(<0.0001)$ VIF (16.94) | $-6.002^{***}(<0.0001)$ VIF (26.19) |
| $d NFCb_{t-1}$ | | $-0.9496^{**} (0.0182)$ | | | | |
| adj. R-squared | 0.862030 | 0.928511 | 0.945949 | 0.969269 | 0.955381 | 0.970789 |
| RESET | 0.00341 | 0.0538322 | 0.0779922 | 0.689538 | 0.0619378 | 0.590528 |
| B. Pagan | 0.0273397 | 0.74826 | 0.0728113 | 0.682419 | 0.0236332 | 0.412093 |
| LM Autocorrel. | 0.435066 | 0.434462 | 0.546 | 0.958748 | 0.685939 | 0.965246 |
| Shapiro test | 0.482117 | 0.915281 | 0.823468 | 0.929946 | 0.421975 | 0.6332 |
| CUSUM test | 0.0691658 | 0.924813 | 0.0898216 | 0.233807 | 0.906024 | 0.308359 |

Distributional driver.

Main result

- Results suggest that an increase in the profit share might favor NFCe.
- By contrast, a larger *FnP* (internal resources oriented toward financial payments) seems to be negatively associated with NFCe's growth.

| | Model A. Eq. (5.1) | Model B. Eq. (5.1) | Model C. Eq. (5.2) | Model D. Eq. (5.2) | Model E. Eq. (6.3) | Model F. Eq. (6.3) |
|----------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| $d PS_t$ | 2.3085*** (0.0040) | 1.3779* (0.0836) | 2.9642*** (<0.0001) | 2.6341*** (<0.0001) | 2.8474*** (<0.0001) | 2.5007***(0.0002) |
| $d FnP_t$ | -0.8524***(0.0042) | -0.522** (0.0351) | -1.243***(<0.0001) | -1.218***(<0.0001) | -1.0932*** (0.0003) | -1.117***(<0.0001) |
| adj. R-squared | 0.862030 | 0.928511 | 0.945949 | 0.969269 | 0.955381 | 0.970789 |
| RESET | 0.00341 | 0.0538322 | 0.0779922 | 0.689538 | 0.0619378 | 0.590528 |
| B. Pagan | 0.0273397 | 0.74826 | 0.0728113 | 0.682419 | 0.0236332 | 0.412093 |
| LM Autocorrel. | 0.435066 | 0.434462 | 0.546 | 0.958748 | 0.685939 | 0.965246 |
| Shapiro test | 0.482117 | 0.915281 | 0.823468 | 0.929946 | 0.421975 | 0.6332 |
| CUSUM test | 0.0691658 | 0.924813 | 0.0898216 | 0.233807 | 0.906024 | 0.308359 |

Fiscal driver.

Main result

- In all models estimated, the coefficient between dTC and $dlogNFCe$ is found to be significantly negative.
- Surprisingly, in model F, the first lag of dTC is significant and positive.

| | Model A. Eq. (5.1) | Model B. Eq. (5.1) | Model C. Eq. (5.2) | Model D. Eq. (5.2) | Model E. Eq. (6.3) | Model F. Eq. (6.3) |
|----------------|-----------------------|-----------------------|-------------------------|-------------------------|-------------------------|-------------------------|
| $d CT_t$ | | | $-1.133^{***}(<0.0001)$ | $-1.018^{***}(<0.0001)$ | $-0.874^{***}(<0.0001)$ | $-0.846^{***} (0.0010)$ |
| $d CT_{t-1}$ | | | | $0.3880^{**} (0.0131)$ | | $0.3826^{**} (0.0129)$ |
| adj. R-squared | 0.862030 | 0.928511 | 0.945949 | 0.969269 | 0.955381 | 0.970789 |
| RESET | 0.00341 | 0.0538322 | 0.0779922 | 0.689538 | 0.0619378 | 0.590528 |
| B. Pagan | 0.0273397 | 0.74826 | 0.0728113 | 0.682419 | 0.0236332 | 0.412093 |
| LM Autocorrel. | 0.435066 | 0.434462 | 0.546 | 0.958748 | 0.685939 | 0.965246 |
| Shapiro test | 0.482117 | 0.915281 | 0.823468 | 0.929946 | 0.421975 | 0.6332 |
| CUSUM test | 0.0691658 | 0.924813 | 0.0898216 | 0.233807 | 0.906024 | 0.308359 |

- NFCe from 2003 onwards is mainly explained by the dynamics of the financial cycle.
- The economy changed towards a CR influenced by the fall of NFCe, mostly associated with the cessation of NFCs' borrowing.
- During the SDR, *NFCb* would have a positive effect again, but much lower than in the past.

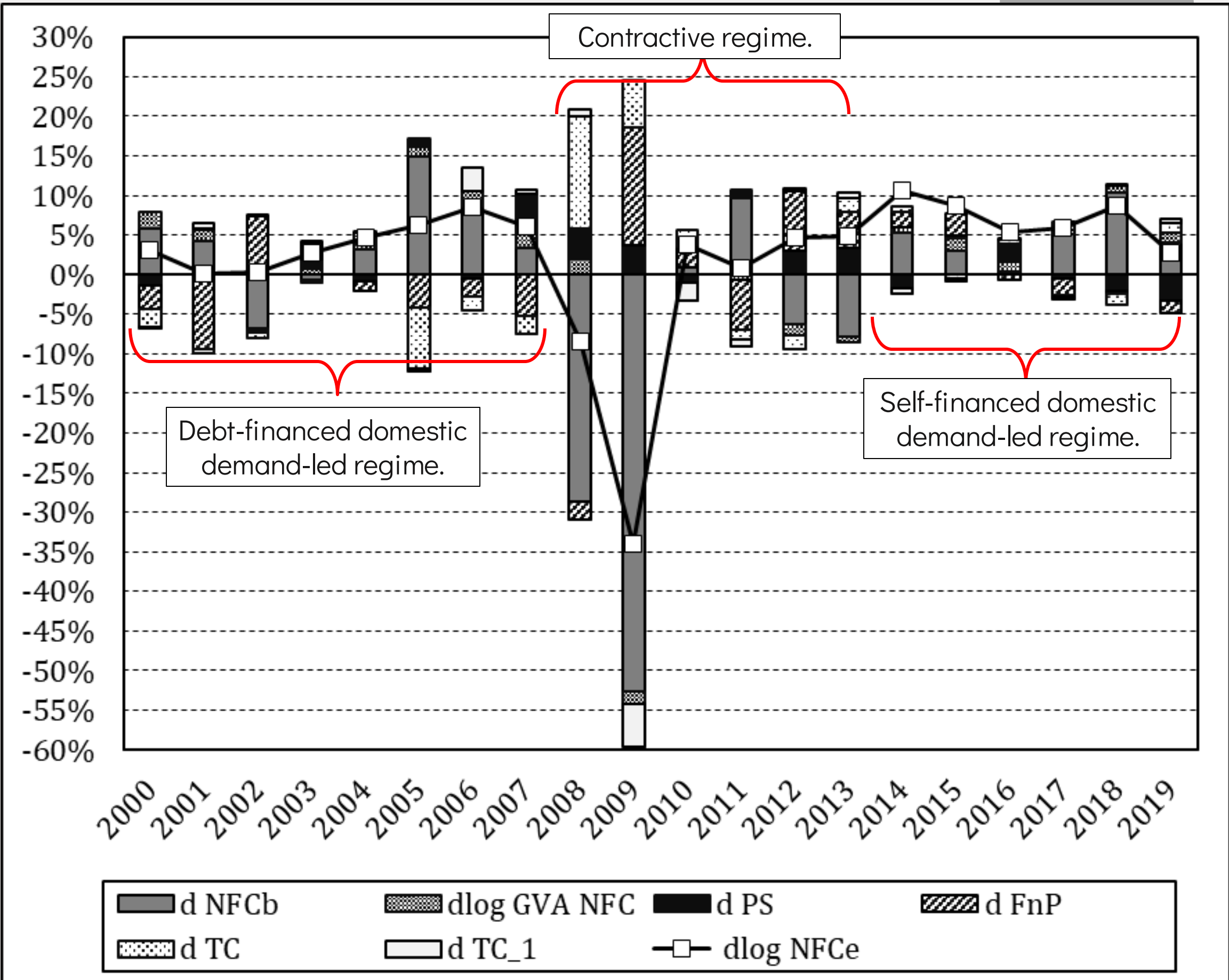
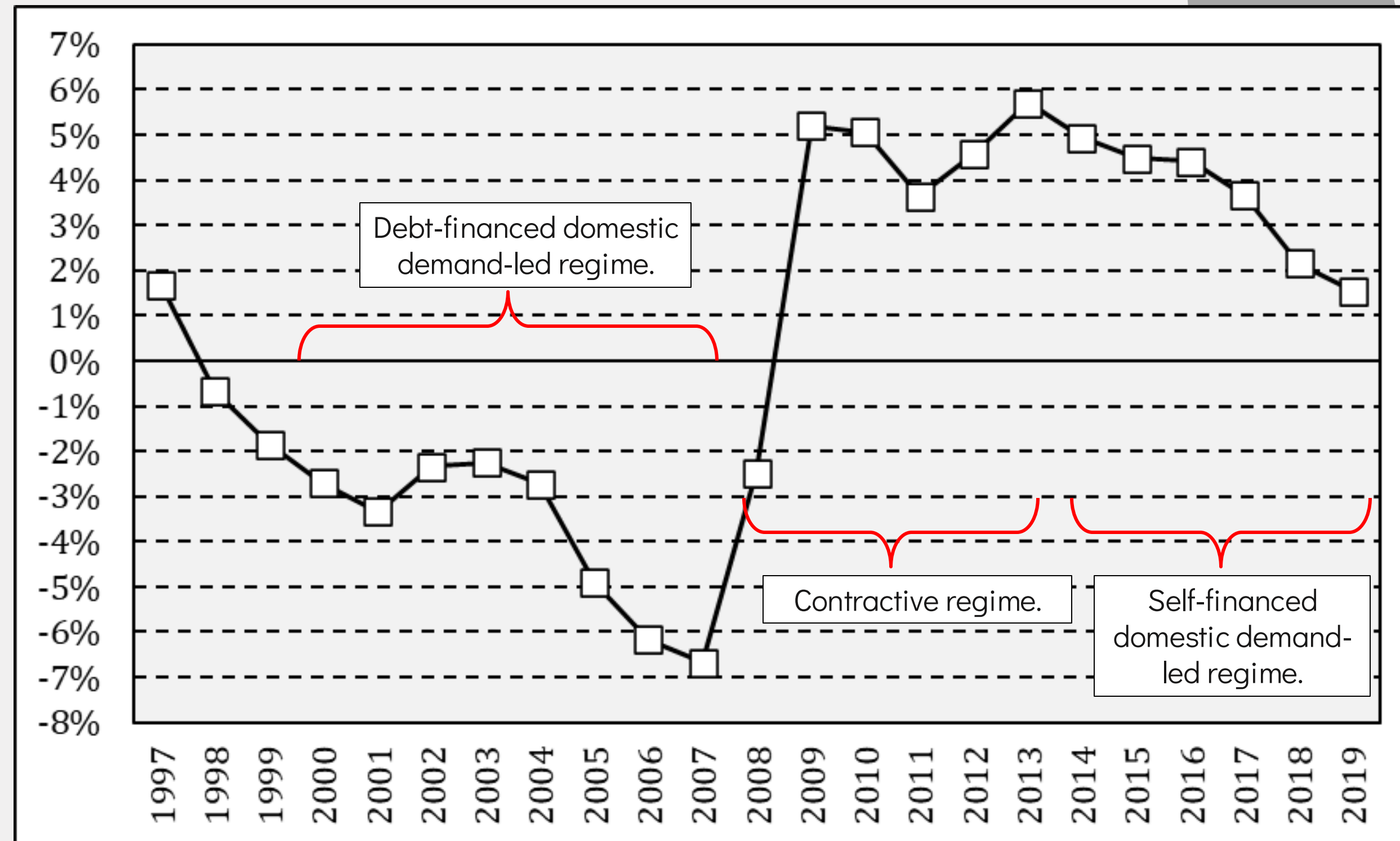


Figure 6.
Contributions of growth drivers to NFCe's growth (dlogNFCe) using coefficients estimated with model D.

1. Expansion of NFCs' borrowing
2. Cessation of NFCs' borrowing with huge correction.
3. Fall in NFCs' lending position (relaxation of the deleveraging process),

Figure 7.

Net lending/borrowing of non-financial companies as a percentage of GDP.



- Functional did not play a major role during the DDR, while *FnP* and *CT* had a negative impact.
- During the CR, distributional and fiscal drivers had a positive effect.
- *PS* and *FnP* generated a positive effect during the first years of the SDR, although they began registering a slight negative effect from 2015 onwards.

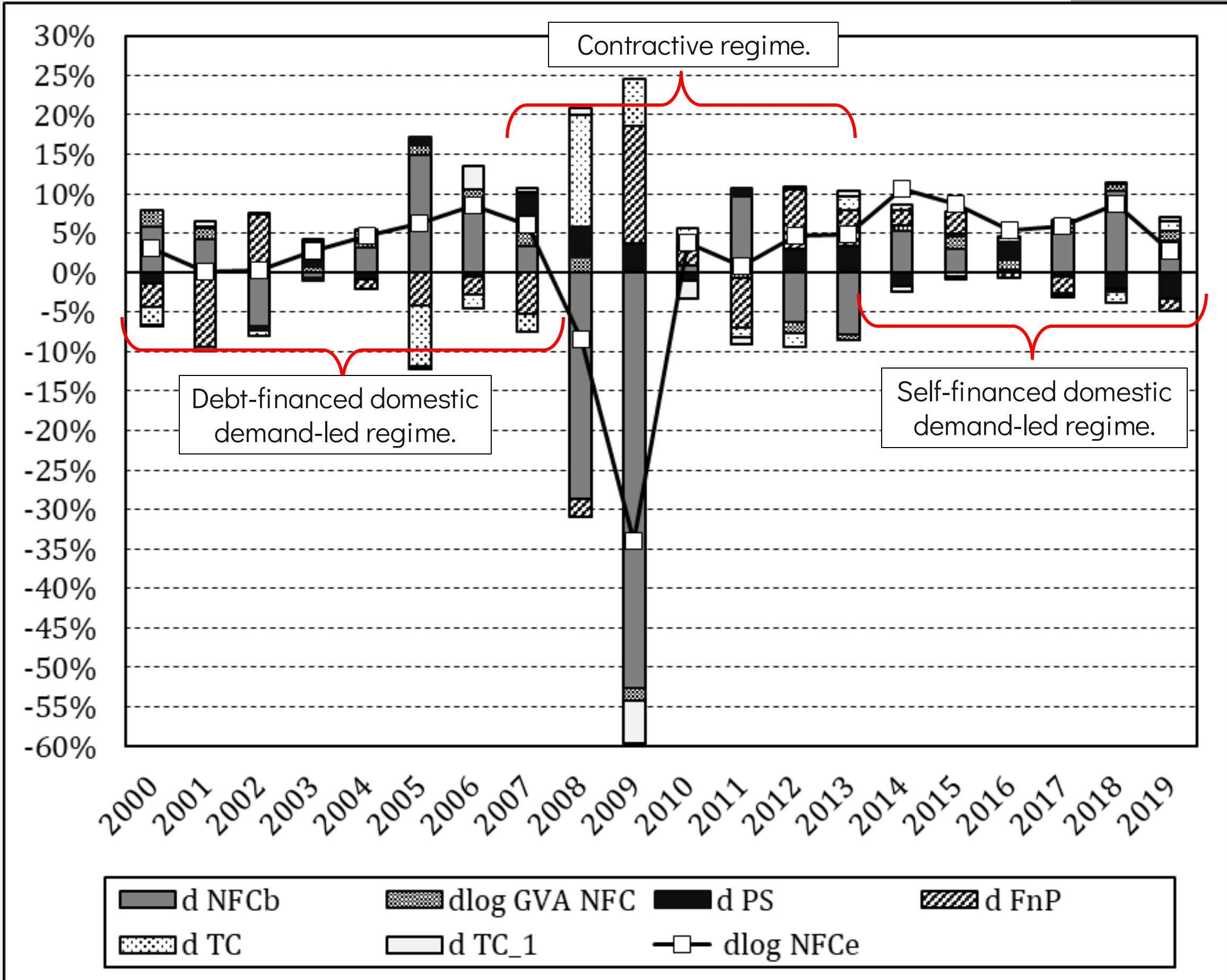


Figure 8.

Contributions to households' spending growth (dlog He) calculated using coefficients estimated with model F.

1. Growing percentage of profits directed towards financial payments.
2. *PS* started growing from 2007 onwards, while *FnP* and *CT* dropped.
3. Stabilization and then *FnP* increased and *PS* started falling

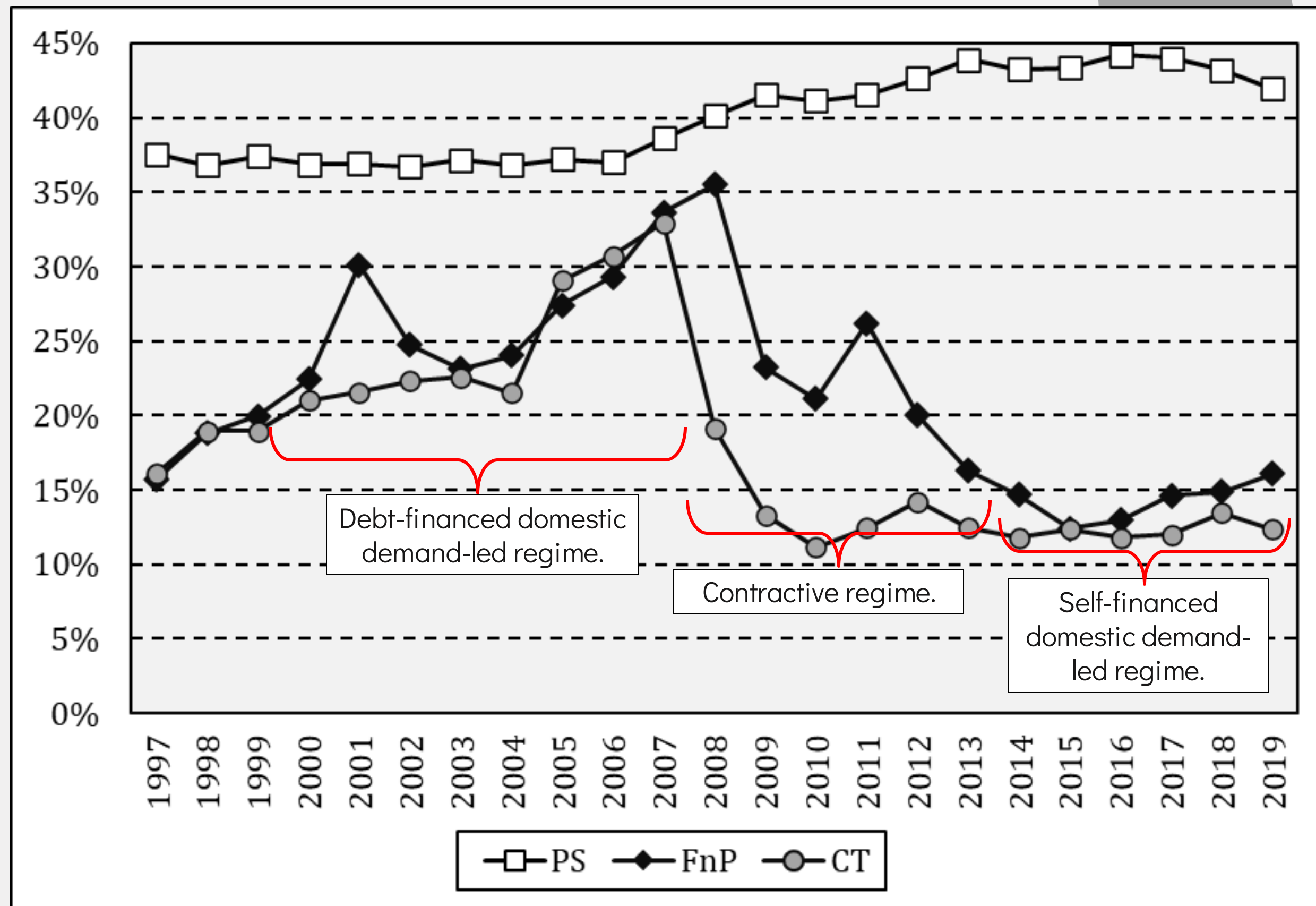
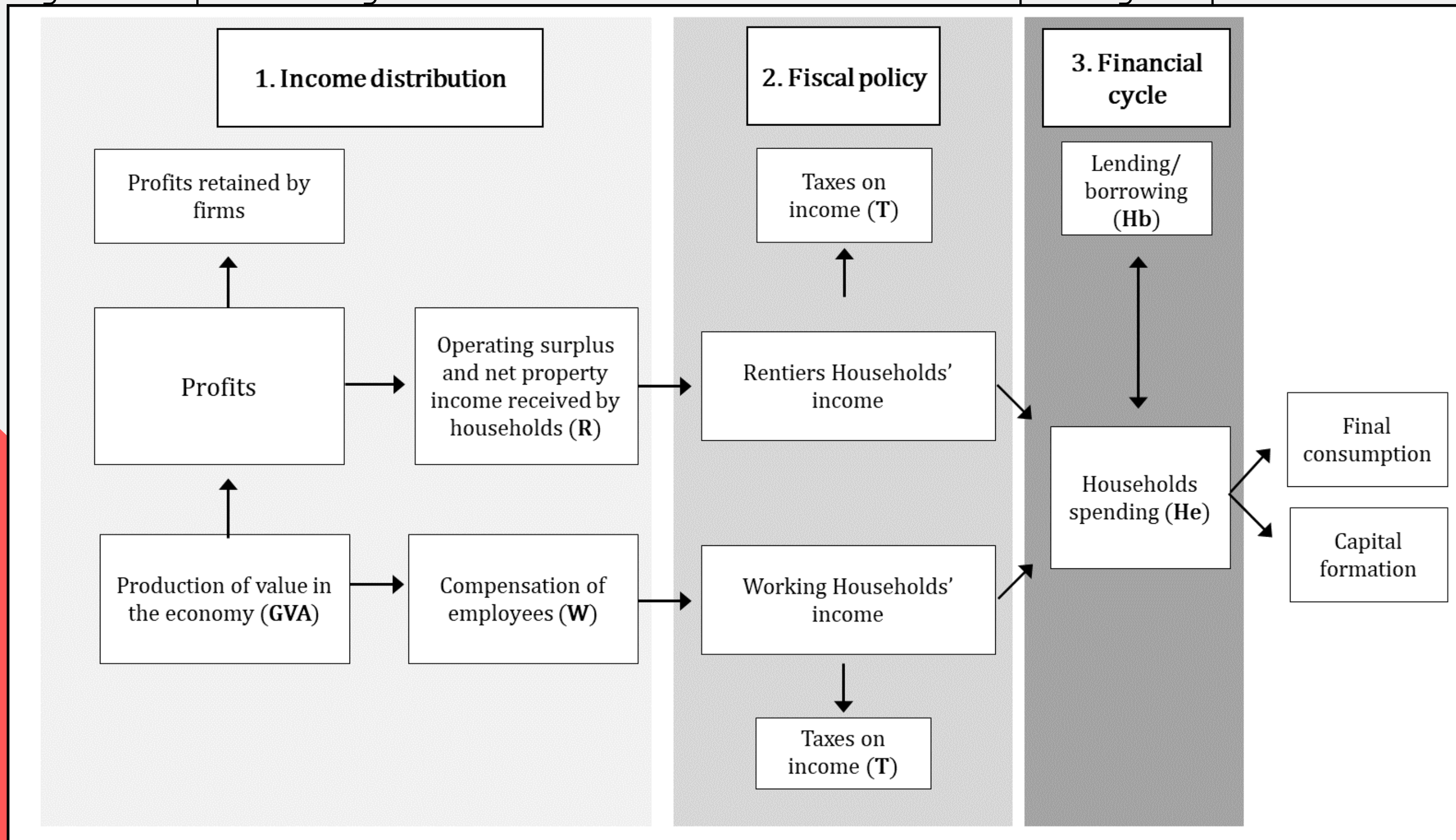


Figure 9.

Net lending/borrowing of non-financial companies as a percentage of GDP.

$$H_e = f(W, R, B_H)$$

Figure 10. Importance of growth drivers in the evolution of households' spending in capital formation.



$$6.1.) d[\log(He)] = x_0 + x_C d[\log(C)] + x_{R\&MI} d[\log(R + MI)] + x_T d[\log(T)] + x_{Hb} d(Hb)$$

$$6.2.) d[\log(He)] = x_0 + x_{C\&MI} d[\log(C\&MI)] + x_R d[\log(R)] + x_{Hb} d(Hb) + x_T d[\log(T)]$$

$$6.3.) d[\log(He)] = x_0 + x_{C\&MI\%GVA} d(C\&MI\%GVA) + x_R d[\log(GVA)] + x_{Hb} d(Hb) + x_T d[\log(T)]$$

Where:

x_0 : the constant term.

C : compensation of employees.

$R\&MI$: rentiers' income plus mixed income.

$C\&MI$: compensation of employees plus mixed income.

R : rentiers' income.

T : taxes on income paid by households.

Hb : net lending/borrowing position of households as percentage of GDP.

$C\&MI\%GVA$: percentage of gross value added distributed to employees and self-employees.

Table 2. Estimation results for Households' spending (He).

| | Model A. Eq. (6.1) | Model B. Eq. (6.1) | Model C. Eq. (6.2) | Model D. Eq. (6.2) | Model E. Eq. (6.3) | Model F. Eq. (6.3) |
|----------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| constant | 0.002 (0.5435) | 0.003(0.4062) | 0.003(0.3834) | 0.001(0.8158) | -0.005(0.0693) | -0.006**(0.0314) |
| d Hbt | -1.153*** (0.0001) | -1.256*** (<0.0001) | -0.909*** (0.0012) | -0.88*** (0.0006) | -0.743*** (0.0004) | -0.748*** (0.0004) |
| dlog Ct | 0.843*** (<0.0001) | 0.642*** (<0.0001) | | | | |
| dlog C&MI | | | 1.016*** (<0.0001) | 0.803*** (<0.0001) | | |
| dlog Rt&MI | 0.119* (0.0626) | 0.092* (0.0975) | | | | |
| dlog Rt | | | -0.008(0.8390) | 0.014(0.7068) | | |
| d C&MI%GVAt | | | | | 0.559** (0.0275) | 0.506*(0.0856) |
| dlog GVAt | | | | | 1.286*** (<0.0001) | 1.188*** (<0.0001) |
| dlog Tt | -0.1473*(0.0514) | -0.1382** (0.0287) | -0.0984(0.1772) | -0.092140 (0.1530) | -0.103** (0.0417) | -0.0896*(0.0657) |
| d Hbt-1 | | -0.3689 (0.1567) | | | | |
| dlog Ct-1 | | 0.2880*** (0.0038) | | | | |
| dlog C&MI-1 | | | | 0.2692**(0.0181) | | |
| dlog GVAt-1 | | | | | | 0.176(0.1532) |
| dlog Tt-1 | | -0.112*(0.0999) | | | | -0.061(0.1241) |
| adj. R-squared | 0.895393 | 0.939223 | 0.901471 | 0.927565 | 0.950644 | 0.957954 |
| RESET | 0.022657 | 0.184113 | 0.261464 | 0.276891 | 0.0448009 | 0.24134 |
| B. Pagan | 0.953066 | 0.979608 | 0.717429 | 0.61464 | 0.566142 | 0.766084 |
| LM Autocorrel. | 0.638749 | 0.517448 | 0.823849 | 0.352081 | 0.965993 | 0.690074 |
| Shapiro test | 0.755785 | 0.258486 | 0.725132 | 0.185219 | 0.600387 | 0.396496 |
| CUSUM test | 0.00240912 | 0.115577 | 0.0001671 | 0.136053 | 0.0075365 | 0.163556 |

Financial driver.

Main result

- Consequently, a rise (drop) in borrowing (lending) as percentage of GDP ($dHb < 0$) is associated with a more intense expansion of H_e .
- Conversely, a rise (drop) in lending ($0 < dHb$) is related to a lower H_e 's growth.

| | Model A. Eq. (6.1) | Model B. Eq. (6.1) | Model C. Eq. (6.2) | Model D. Eq. (6.2) | Model E. Eq. (6.3) | Model F. Eq. (6.3) |
|----------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| d Hbt | -1.153***(0.0001) | -1.256***(<0.0001) | -0.909***(0.0012) | -0.88***(0.0006) | -0.743***(0.0004) | -0.748***(0.0004) |
| d Hbt-1 | | -0.3689 (0.1567) | | | | |
| adj. R-squared | 0.895393 | 0.939223 | 0.901471 | 0.927565 | 0.950644 | 0.957954 |
| RESET | 0.022657 | 0.184113 | 0.261464 | 0.276891 | 0.0448009 | 0.24134 |
| B. Pagan | 0.953066 | 0.979608 | 0.717429 | 0.61464 | 0.566142 | 0.766084 |
| LM Autocorrel. | 0.638749 | 0.517448 | 0.823849 | 0.352081 | 0.965993 | 0.690074 |
| Shapiro test | 0.755785 | 0.258486 | 0.725132 | 0.185219 | 0.600387 | 0.396496 |
| CUSUM test | 0.00240912 | 0.115577 | 0.0001671 | 0.136053 | 0.0075365 | 0.163556 |

Distributional driver.

Main result

- A higher positive effect of compensation of employees (C) than rentiers' income including mixed income received (R&MI).
- Isolating rentiers' income (R) and adding mixed income to compensation of employees (C&MI), no significant relationship between R and He is found, while the elasticity between He and C&MI increases.
 - When we focus on functional distribution, we find a positive significant relationship.

| | Model A. Eq. (6.1) | Model B. Eq. (6.1) | Model C. Eq. (6.2) | Model D. Eq. (6.2) | Model E. Eq. (6.3) | Model F. Eq. (6.3) |
|--------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| dlog Ct | 0.843*** (<0.0001) | 0.642*** (<0.0001) | | | | |
| dlog C&MI _t | | | 1.016*** (<0.0001) | 0.803*** (<0.0001) | | |
| dlog Rt&MI _t | 0.119* (0.0626) | 0.092* (0.0975) | | | | |
| dlog Rt | | | -0.008(0.8390) | 0.014(0.7068) | | |
| d C&MI%GVAt | | | | | 0.559** (0.0275) | 0.506*(0.0856) |
| dlog GVAt | | | | | 1.286*** (<0.0001) | 1.188*** (<0.0001) |
| dlog Ct-1 | | 0.2880*** (0.0038) | | | | |
| dlog C&MI _{t-1} | | | | 0.2692** (0.0181) | | |
| adj. R-squared | 0.895393 | 0.939223 | 0.901471 | 0.927565 | 0.950644 | 0.957954 |
| RESET | 0.022657 | 0.184113 | 0.261464 | 0.276891 | 0.0448009 | 0.24134 |
| B. Pagan | 0.953066 | 0.979608 | 0.717429 | 0.61464 | 0.566142 | 0.766084 |
| LM Autocorrel. | 0.638749 | 0.517448 | 0.823849 | 0.352081 | 0.965993 | 0.690074 |
| Shapiro test | 0.755785 | 0.258486 | 0.725132 | 0.185219 | 0.600387 | 0.396496 |
| CUSUM test | 0.00240912 | 0.115577 | 0.0001671 | 0.136053 | 0.0075365 | 0.163556 |

Fiscal driver.

Main result

- In all models, the coefficient representing the relationship between H_e and T is negative, suggesting the potential contractionary.

| | Model A. Eq. (6.1) | Model B. Eq. (6.1) | Model C. Eq. (6.2) | Model D. Eq. (6.2) | Model E. Eq. (6.3) | Model F. Eq. (6.3) |
|----------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| dlog T_t | -0.1473*(0.0514) | -0.1382** (0.0287) | -0.0984(0.1772) | -0.092140 (0.1530) | -0.103** (0.0417) | -0.0896*(0.0657) |
| dlog T_{t-1} | | -0.112*(0.0999) | | | | -0.061(0.1241) |
| adj. R-squared | 0.895393 | 0.939223 | 0.901471 | 0.927565 | 0.950644 | 0.957954 |
| RESET | 0.022657 | 0.184113 | 0.261464 | 0.276891 | 0.0448009 | 0.24134 |
| B. Pagan | 0.953066 | 0.979608 | 0.717429 | 0.61464 | 0.566142 | 0.766084 |
| LM Autocorrel. | 0.638749 | 0.517448 | 0.823849 | 0.352081 | 0.965993 | 0.690074 |
| Shapiro test | 0.755785 | 0.258486 | 0.725132 | 0.185219 | 0.600387 | 0.396496 |
| CUSUM test | 0.00240912 | 0.115577 | 0.0001671 | 0.136053 | 0.0075365 | 0.163556 |

- During the DDR, the financial sphere contributed positively to He in almost all years.
- The initial fall towards CR is associated with the cessation of households' borrowing,
- During the SDR, Hb plays a relatively neutral role over the entire period.

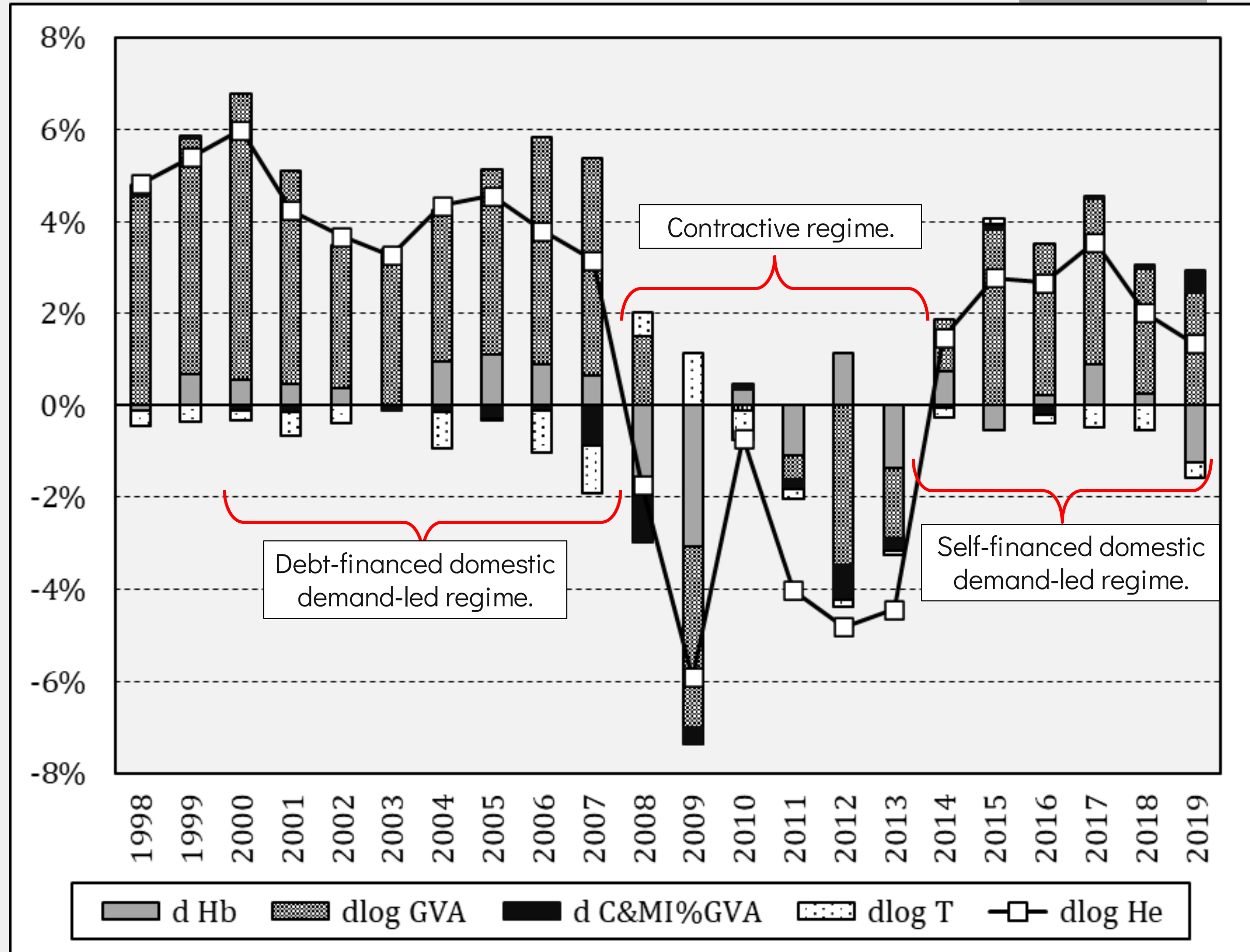


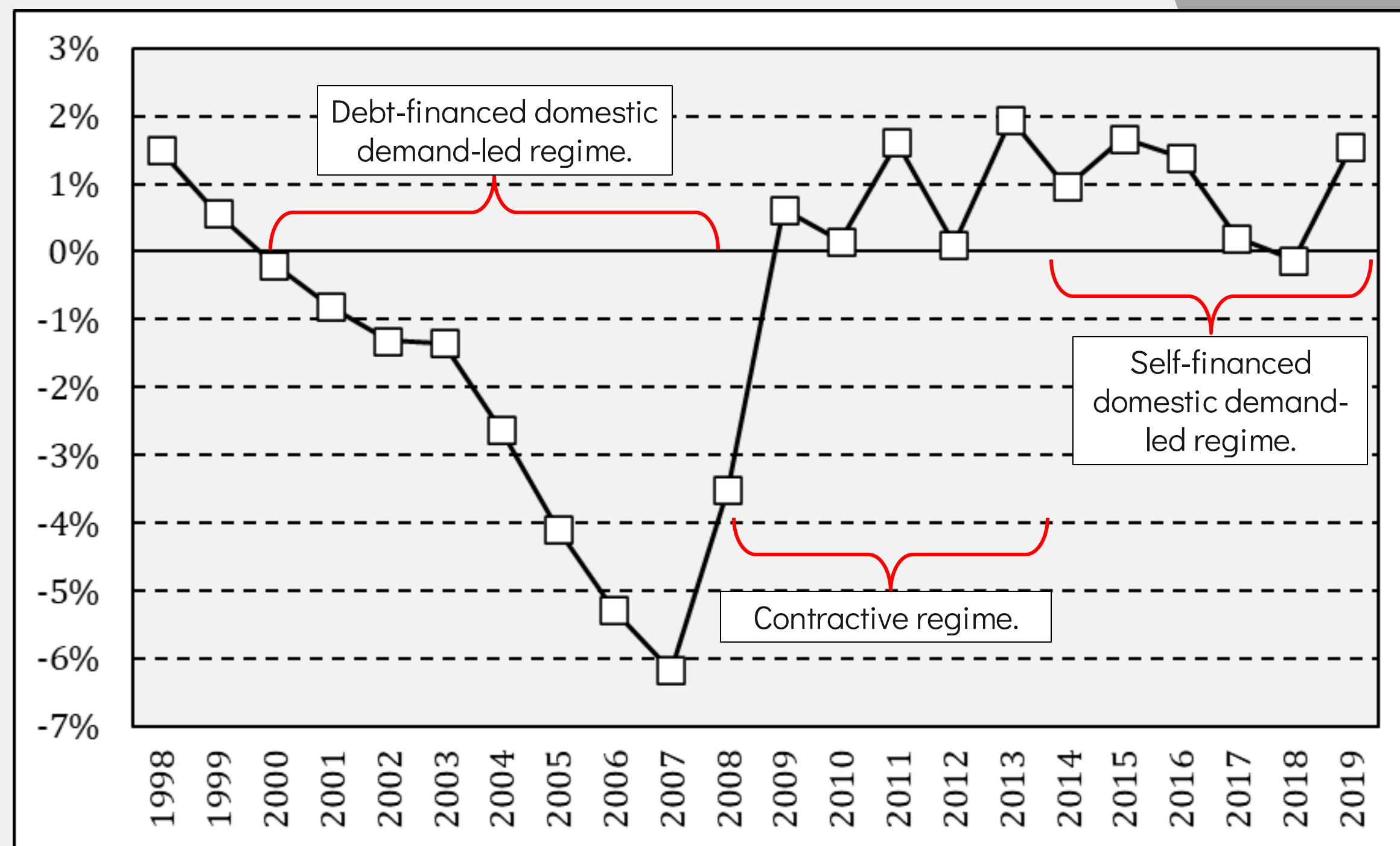
Figure 11.

Contributions to households' spending growth (dlog He) calculated using coefficients estimated with model F.

1. Expansion of households' borrowing
2. Cessation of households' borrowing with huge correction.
3. *Hb* remained consistently positive and fluctuating.

Figure 12.

Net lending/borrowing of households as a percentage of GDP.



- The *GVA* explains a significant part of H_e 's growth (strong correlation between *GVA* and the compensation of employees).
- During the DDR period, the functional distributional had a neutral impact.
- During the CR, the significant fall in remuneration, both due to the decline in total income generated and the redistribution.
- Distribution does not constitute a relevant factor from 2014 onwards until 2019.

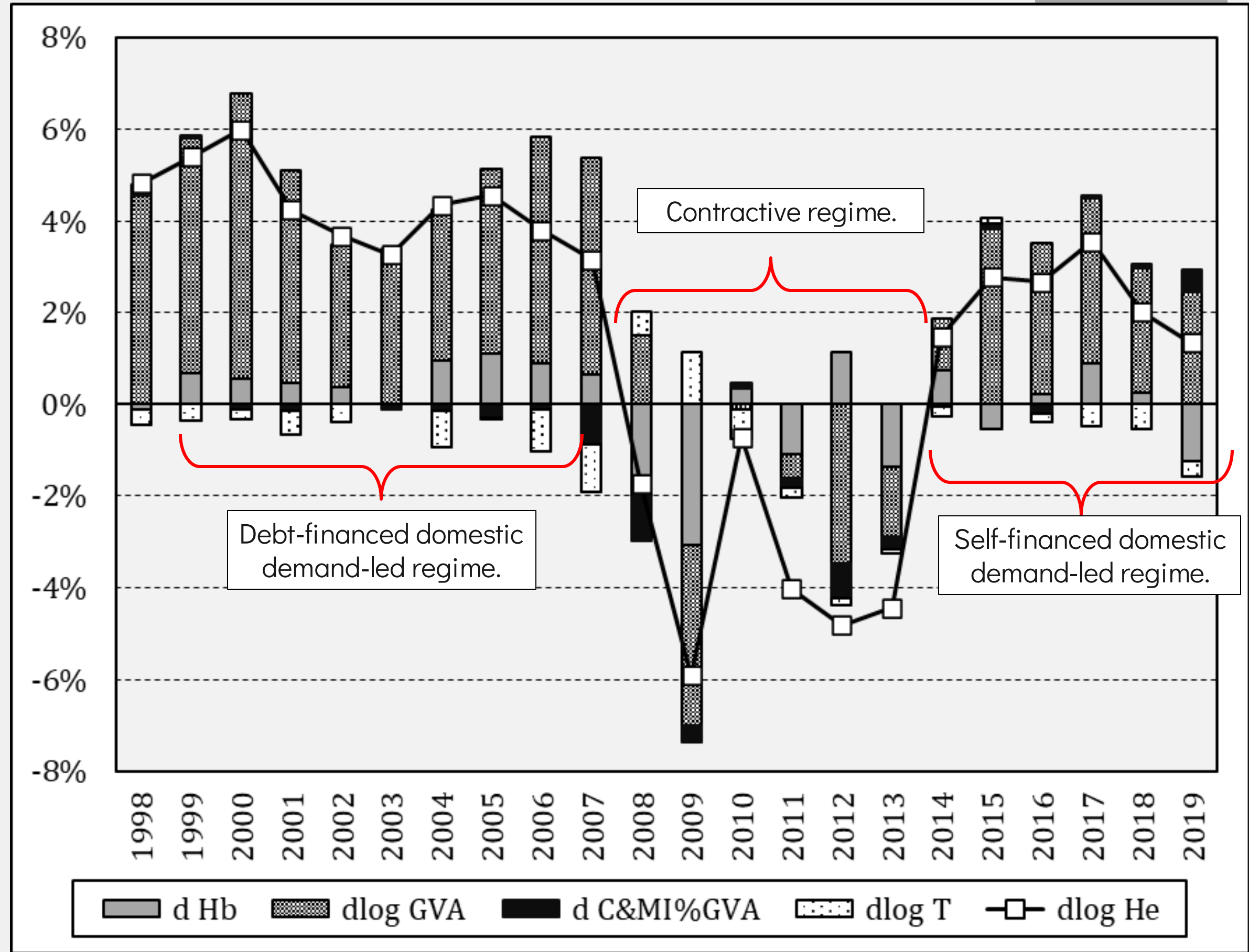


Figure 13.

Contributions to households' spending growth ($d \log H_e$) calculated using coefficients estimated with model F.

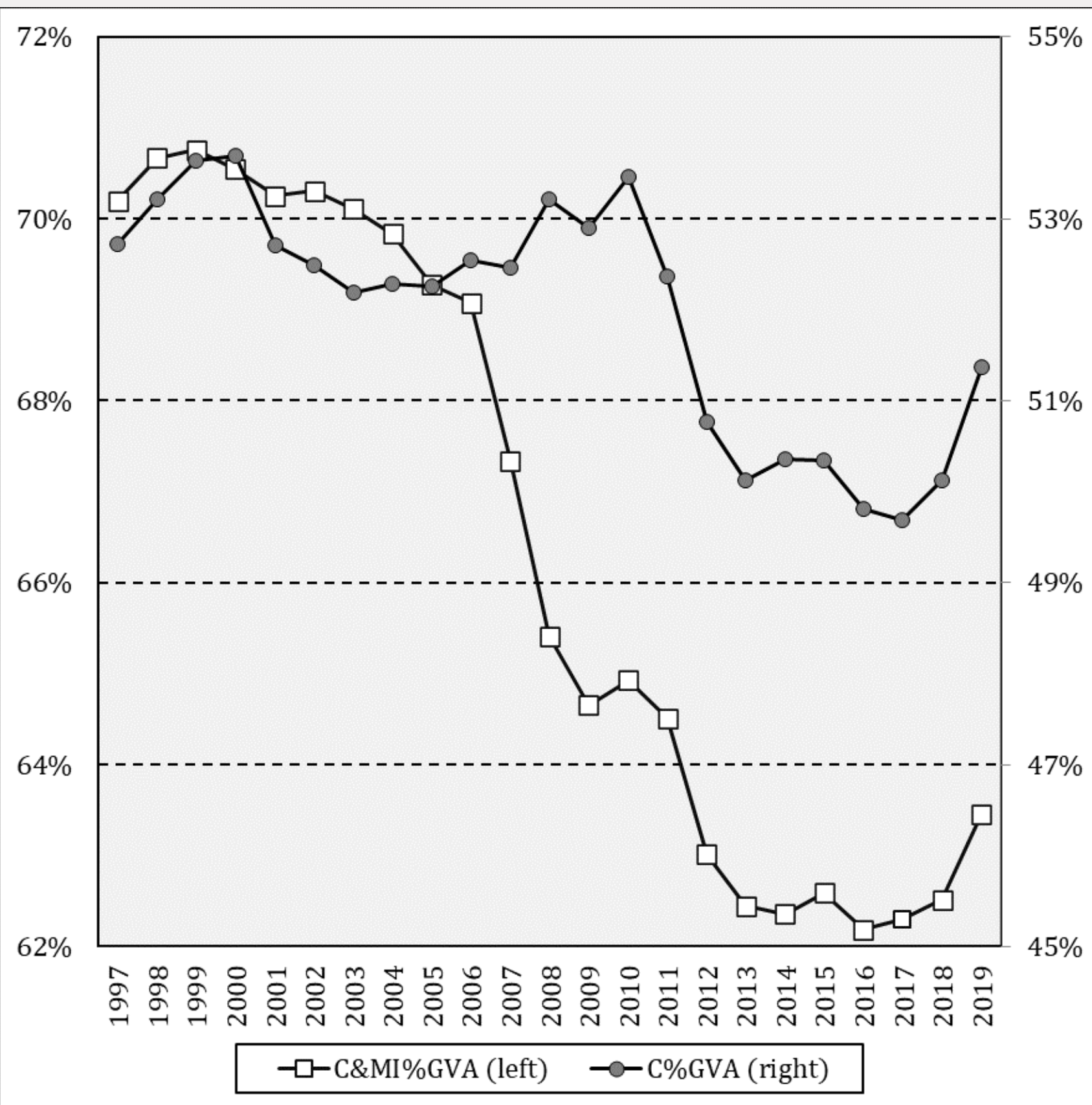


Figure 14. Contributions of domestic demand (DD) and net exports (XN) to GDP growth rate.

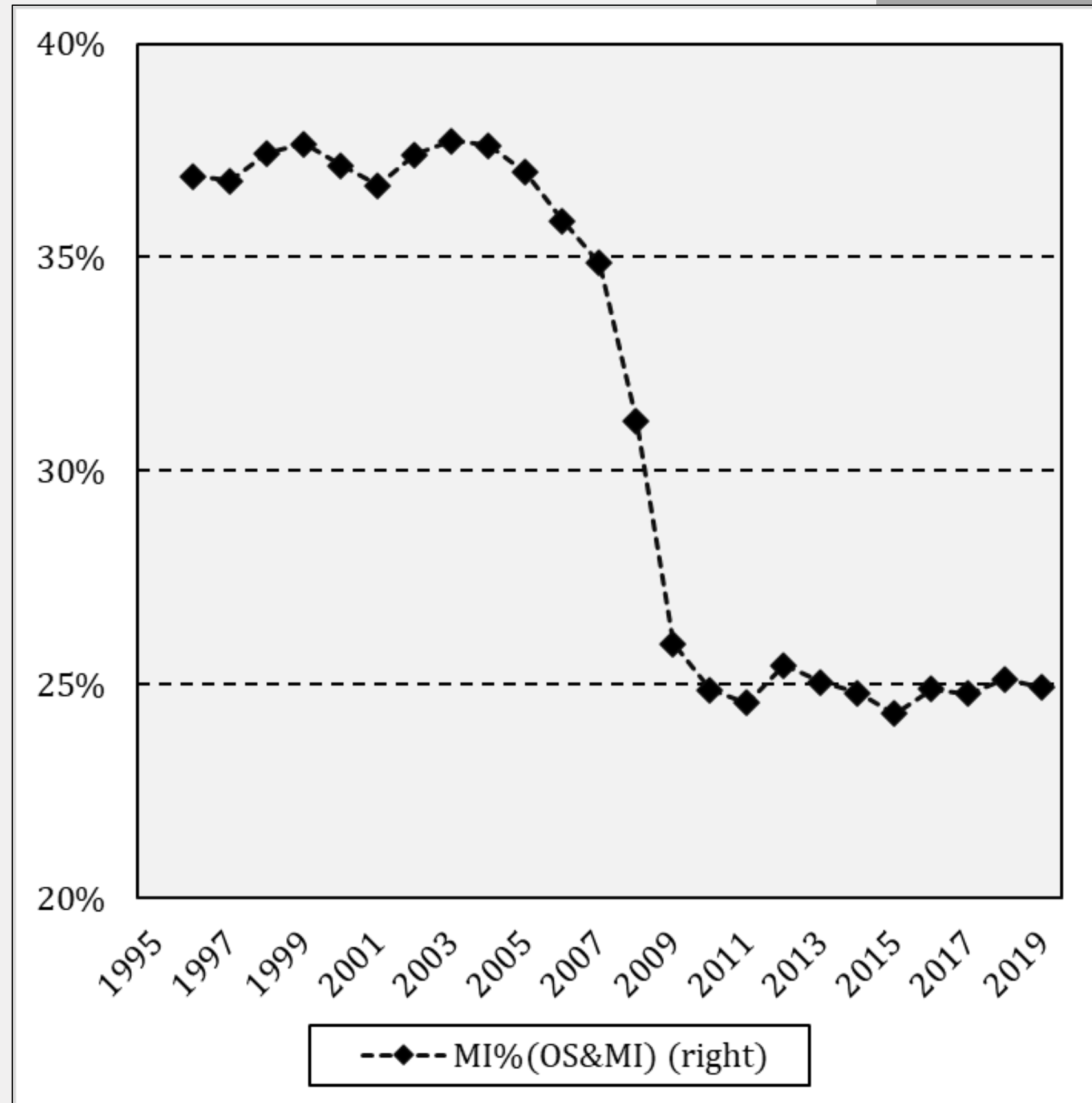


Figure 15. Contributions of domestic demand (DD) and net exports (XN) to GDP growth rate.

- Taxation, in some years has a negative impact, but in other years is completely neutral despite the increase of households' income (expansionary fiscal policy).
- The fall of households' income due to the crisis during the first two years led to a decline in T , which contributed positively to H_e .
- T experienced positive growth despite the economic recession and declining incomes.
- During the SDR, T exerts a negative effect, although this effect is less pronounced than in the previous period.

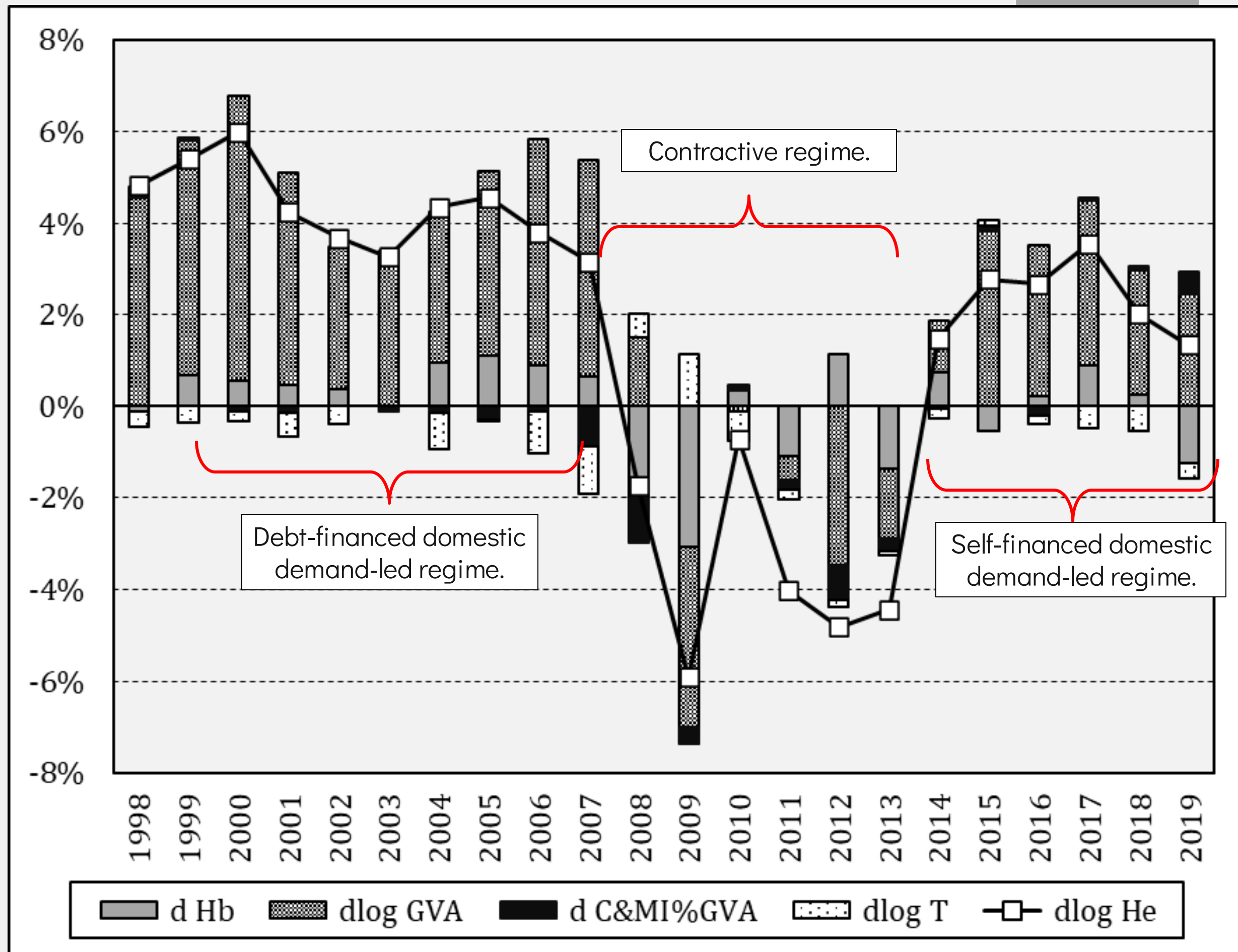


Figure 16.

Contributions to households' spending growth (dlog He) calculated using coefficients estimated with model F.

Conclusions.

1

Existence of 3 of regimes:

- 1) Debt-financed domestic demand-led regime (2000-2007).
- 2) Contractive regime (2008-2013).
- 3) Self-financed domestic demand-led regime (2014-2019).

2

These changes are primarily driven by the components of non-financial private demand:

1. Households' spendings.
2. Non-financial companies' spendings.

3

We have found evidence that supports the idea that growth drivers (distribution, finance, fiscal policy) effectively influenced the determination of Spain's growth regime.

4

Implications:

1. Results suggest the usefulness of studying growth regimes through the lens of growth drivers (complementary to other views like the *macroeconomic policy regime*).
2. Consideration of growth drivers by policy-makers.

References

- Akcay, Ü., Hein, E., & Jungmann, B. (2022). Financialisation and Macroeconomic Regimes in Emerging Capitalist Countries Before and After the Great Recession. *International Journal of Political Economy*, 51(2), 77-100.
- Álvarez, I., Uxó, J., & Febrero, E. (2019). Internal devaluation in a wage-led economy: the case of Spain. *Cambridge Journal of Economics*, 43(2), 335–360. doi:<https://doi.org/10.1093/cje/bey027>
- Epstein, & A., G. (2005). Financialization and the World Economy. En Epstein, & G. A., *Financialization and the World Economy* (págs. 3-16). Cheltenham: Edward Elgar.
- Hein, E. (2019). Financialisation and tendencies towards stagnation: the role of macroeconomic regime changes in the course of and after the financial and economic crisis 2007–09. *Cambridge Journal of Economics*, 43(4), 2019.
- Hein, E., & Martschin, J. (2021). Demand and growth regimes in finance-dominated capitalism and the role of the macroeconomic policy regime: a post-Keynesian comparative study on France, Germany, Italy and Spain before and after the Great Financial Crisis and the Great Recession. *Review of Evolutionary Political Economy*, 2, 493–527.
- Hein, E. (2023). Varieties of demand and growth regimes – post-Keynesian foundations. *European Journal of Economics and Economic Policies: Intervention, Advanced Access Articles*, 1-34.
- Jungmann, B. (2023). Growth drivers in emerging capitalist economies: building blocks for a post-Keynesian analysis and an empirical exploration of the years before and after the Global Financial Crisis. *Review of Evolutionary Political Economy*, 4, 349–386.
- Kohler, K., & Stockhammer, E. (2022). Growing differently? Financial cycles, austerity, and competitiveness in growth models since the Global Financial Crisis. *Review of International Political Economy*, 29(4), 1314-1341.
- Labat-Moles, H. & Summa, R. (2024). A supermultiplier demand-led growth accounting analysis applied to the Spanish economy (1998–2019). *European Journal of Economics and Economic Policies: Intervention*, 21(1), 42-72.
- Stockhammer, E., & Novas Otero, A. (2022). A tale of housing cycles and fiscal policy, not competitiveness. *Growth drivers in Southern Europe*. *New Political Economy*, 29(4), 1314-1341.
- Stockhammer, E. (2022). Post-Keynesian Macroeconomic Foundations for Comparative Political Economy. *Politics & Society*, 50(1), 156–187.
- Villanueva, P., Cárdenas, L., Uxó, J., & Álvarez, I. (2020). The role of internal devaluation in correcting external deficits: The case of Spain. *Structural Change and Economic Dynamics*, 54, 282-296. doi:<https://doi.org/10.1016/j.strueco.2020.03.008>

Thanks for your attention!

Contact information

Web: <https://www.danielfelicianocruz.com/>

Email: daniel.feliciano@ehu.eus

Number: +34 689 543 359



SCAN ME!



Funded through a FPU Scholarship by:

