KIMOD 2.0

Documentation of changes in the model from January 2007 to January 2009

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[1] I appreciate helpful comments from Göran Hjelm, Jonny Nilsson, Juhana Vartiainen, and seminar participants at NIER.

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Summary in Swedish

KIMOD är en modell som utvecklas kontinuerligt. Sedan den första dokumentationen av KIMOD i januari 2007 har modellen förändrats gradvis. Det är nu dags att sammanfatta förändringarna i det som är den nya versionen av modellen – KIMOD 2.0. Nya data och nya bedömningar har kommit under tiden som gjort att modellens parametrar förändrats. I rapportens kapitel 1 diskuteras och visas den nya kalibreringen av steady state. I utvecklingsarbetet har ingått en modellering av hur ekonomins aktörer uppfattar och internaliserar permanenta störningar i deras beteende. Detta visas i kapitel 2. Förändringar i modellen förändrar dess dynamiska egenskaper. I kapitel 3 jämförs därför skillnader i responser mellan KIMOD 2.0 och KIMOD 1.0 för fem permanenta och fem temporära störningar.

För mer information om KIMOD, se www.konj.se/kimod.

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Abstract

KIMOD is a model in constant progress. Since the first documentation of KIMOD in January 2007, the model in use has changed gradually. It's now time to introduce the second version of the model – KIMOD 2.0. As time passes, new data and new judgement causes parametric changes. In chapter 1, some news in the calibration of steady state is discussed. Moreover, we have also introduced a new parameterisation concerning the time it takes for the individuals to recognize and internalize permanent shocks into their behaviour. This is shown in chapter 2. Changes in the model changes the dynamic properties. Threfore, in chapter 3, we compare the impulse-response functions of KIMOD 2.0 and KIMOD 1.0 for five permanent and five temporary shocks.

For more information about KIMOD, see www.konj.se/kimod.

Contents

1. New calibration of steady-state[2]

Since the documentation of KIMOD 1.0 in Bergvall et al. (2007), a number of changes have been done in the model. In particular, about 30 parameters of the steady-state model have been recalibrated. Some are based on new judgement, others on empirical estimates.

The long-run growth rate of productivity has been revised upwards from 1.8 percent per year in KIMOD 1.0 to 2.0 percent in KIMOD 2.0. This is consistent with NIER's judgement of long-run GDP-productivity growth (SOU 2008:14). The long-run growth rate of the labour supply is still zero. This implies that flow variables, e.g. GDP, consumption, investments, exports etc., grow at 2.0 percent per year in steady state.

The long-run real interest rate is now 5.6 percent, which is 2.4 percentage points lower than in KIMOD 1.0. This follows from the assumption of a lower, and more realistic, private investment ratio to GDP (17 percent in current prices), together with the assumption that the capital-output ratio in the private sector was in equilibrium in 2007. The equilibrium capital stock is therefore larger than before. The desired investment-capital ratio is thus lower, and this assumption determines the real interest rate. A lower real interest rate implies a larger capital stock in steady state, as well as a higher investment level. The assumptions above also implies that the parameter that determines the cost of capital adjustment is now larger, which makes it more expensive to adjust the capital stock after a shock.

The subjective discount rate is now higher (closer to one), which follows from the lower real interest rate and the fact that the probability of survival is left unchanged (0.96). This affects the consumption path. The marginal propensity to consume out of wealth is lower, at the same time as consumption growth is higher (due to higher productivity growth).

In the labour market, the separation rate has increased from the low 0.04 in KIMOD 1.0 to the more empirically adequate 0.20. This implies that the average time a job survives has decreased from 25 to 5 years. The calibrated unemployment benefit has been lowered from 80 to 70 percent of the wage, which affects the wage bargaining process. The labour market is calibrated to meet the judgement of NIER concerning equilibrium unemployment as well as long term forecasts concerning labour supply and average hours worked.

The magnitude of the estimated elasticity of real exchange rate to net foreign assets is now lower. The elasticity is now –0.17, compared to –0.30 in KIMOD 1.0. This means less appreciation of the real exchange rate in response to a given raise in net foreign assets, caused by e.g. a cut in government debt. This recalibration is based on our judgement that KIMOD 1.0 overestimated the elasticity between government budget balances and the real economy.

Table 1 depicts some of the steady state parameters in KIMOD 2.0.

[2] This chapter builds on Höglin (2008).

Table 1 KIMOD 2.0 – Steady state calibration

Parametric values

#	Label	Name	Value
1	Growth factor, productivity A(t)/A(t-1)	AGRF_SS	1.0202
2	Government wage as share of private wage Wg/Wp	ALFA_SS	0.93
3	Subjective discount factor	BETA_SS	0.9725
4	Depreciation rate	DELTA_SS	0.0742
5	Elasticity in CH equation	ECH_SS	0.3323
6	Elasticity in IH equation	EIH_SS	0.543
7	Estimated elasticity of unempl. in matching function	EMA_SS	0.4
8	Estimated elasticity of RER to export relative import prices	ERER1_SS	-0.75
9	Estimated elasticity of RER to relative productivity	ERER2_SS	-0.41
10	Estimated elasticity of RER to net foreign assets	ERER3_SS	-0.17
11	Elasticity in XH equation	EXH_SS	0.5721
12	Elasticity of capital in production function	EYPG_SS	0.375
13	Vacancy cost relative to real wage	GAMMA_SS	1.0031
14	Capital stock, general government, ratio Kg/Y	KG_Y_SS	0.4542
15	Installation cost parameter	LAMBDA_SS	0.6911
16	Employment, general government	LG_SS	1.5218
17	Hours worked, general government, average LHg/Lg	LHG_LG_SS	1.512
18	LH/L Average working hours	LH_L_SS	1.665
19	Relative bargaining strength of unions	MY_SS	0.5
20	Growth factor, labor supply LS(t)/LS(t-1)	NY_SS	0
21	Relative price PByg/P	PBYG_P_SS	1.528
22	Government consumption, nominal share of GDP	PGG_PY_SS	0.268
23	Growth factor, GDP-deflator in steady state	PGRF_SS	1
24	Unemployment benefit replacement ratio	PHI_SS	0.7
25	Probability of survival	PID_SS	0.9618
26	Gross investments, general government, nominal share of GDP	PIIG_PY_SS	0.03
27	Net bond holdings, general government, nominal share of GDP	PMBG_PY_SS	0.27
28	Relative price, PMF/PF	PMF_PF_SS	1
29	Real interest rate	RY_SS	0.0563
30	Separation rate	S_SS	0.2
31	Tax rate on private consumption	TAUC_SS	0.277
32	Tax rate on dividends	TAUD_SS	0.466
33	Tax rate on government consumption	TAUG_SS	0.0813
34	Tax wedge	TAUY_SS	0.1633
35	Transfers, share of GDP	TBAR_PY_SS	0.137
36	Transfers, share of GDP	TR_PY_SS	0.16
37	Constant in Ch equation	ZCH_SS	2.2346
38	Constant in Ih equation	ZIH_SS	2.0066
39	Constant in MA equation	ZMA_SS	8.5853
40	Constant in Pm_P equation	ZPM_P_SS	0.0073
41	Constant in RER equation	ZRER_SS	118.3615
42	Constant in Xh equation	ZXH_SS	2.0988

Note: ”CH”/”IH”/”XH” = domestic produced consumption/investment/exports goods, ”RER” = real exchange rate

Source: NIER.

2. New variables in the sticky-price model

KIMOD solves for the behaviour in both "reality", with sticky prices (new-Keynesian economy), and in a world with flexible prices (neoclassical economy). One feature of KIMOD 1.0 was that the sticky price economy reacted very much the same as the flexible price economy to permanent shocks; i.e. the agents reacted too fast and too smart. This stems from the way the sticky price equations were written. This is now modified in KIMOD 2.0 and explained as follows.

In KIMOD 1.0, the equations describing sticky price behaviour were (a bit simplifying) written as:

$$X_t = X_{t-1} + dX_t^{FP} - (1-\beta)\left(X_{t-1} - X_{t-1}^{FP}\right) + \gamma\left(Y_t - Y_t^{FP}\right) + \varepsilon_t^{Temp},$$

where X can be any endogenous variable of KIMOD, and $dX_t^{FP} = X_t^{FP} - X_t^{FP}$ where "FP" stands for flexible prices. This equation says that this year's value is equal to last year's value, plus the annual change of the flex-price variable, plus an error correction term, plus the gap between the sticky price value and the flexible price value of other endogenous variables, plus, finally, an error term capturing temporary shocks only. The flexible price value, which is derived from robust economic theory, helps to explain the development of the sticky price behaviour.

The problem with this writing is that X_t^{FP} (as well as Y_t^{FP}) is included simultaneously. A permanent shock that shifts the flex-price value also shifts the sticky price values in the same period. However, we expect more "sluggishness" in the sticky price economy.

The solution is to use an "expectation" formulation. In KIMOD 2.0 the following equation form is used generically:

$$X_t = X_{t-1} + EdX_t^{FP} - (1-\beta)\left(X_{t-1} - EX_{t-1}^{FP}\right) + \gamma\left(Y_t - EY_t^{FP}\right) + \varepsilon_t^{Temp}$$

where
$$\begin{cases} EdX_t^{FP} = (1-\eta_1-\eta_2)\,dX_t^{FP} + \eta_1 dX_{t-1}^{FP} + \eta_2 dX_{t-2}^{FP} \\ EdX_{t-1}^{FP} = (1-\eta_2)\,dX_{t-1}^{FP} + \eta_2 dX_{t-2}^{FP} \\ EX_t^{FP} = X_{t-2}^{FP} + EdX_{t-1}^{FP} + EdX_t^{FP} \\ EX_{t-1}^{FP} = X_{t-2}^{FP} + EdX_{t-1}^{FP} \end{cases}$$

It is now the **expected** development with flexible prices that helps explaining the sticky price behaviour. The pros and cons of this specification are as follows:

Pros: First, we introduce a "handle", the parameters η_1 and η_2, which enables us to control the amount of information that the economic agents are exposed to. Second, the agent's reaction to permanent shocks is now more drawn-out and not as instantaneous and omniscient as before.

Cons: First, the number of variables increases substantially. Table 2 below shows new variables in the sticky-price model and the counterpart in the flex-price model. Second, a new equilibrium measure is introduced: "expected flex price equilibrium".

Table 2 New endogenous variables in the sticky price model

"Expectations" of the flex-price counterpart

	Levels		Log differentials	
"Expectation" of:	Sticky price	cf. Flex price	Sticky price	cf. Flex price
Productivity (1 lag)			DLAH1EFP_SP	DLAH_FP(-1)
(current)	AHE0FP_SP	AH_FP(0)	DLAH_SP	DLAH_FP(0)
(1 lead)	AHE1FP_SP	AH_FP(1)		
(2 leads)	AHE2FP_SP	AH_FP(2)		
Net asset holdings, government	BGE0FP_SP	BG_FP(0)		
Household consumption			DLC2EFP_SP	DLC_FP(-2)
	C1EFP_SP	C_FP(-1)	DLC1EFP_SP	DLC_FP(-1)
	CE0FP_SP	C_FP(0)	DLC_SP	DLC_FP(0)
Private investments	IP1EFP_SP	IP_FP(-1)	DLIP1EFP_SP	DLIP_FP(-1)
	IPE0FP_SP	IP_FP(0)	DLIP_SP	DLIP_FP(0)
Capital, private sector	KP1EFP_SP	KP_FP(-1)	DLKP1EFP_SP	DLKP_FP(-1)
	KPE0FP_SP	KP_FP(0)	DLKP_SP	DLKP_FP(0)
	KPE1FP_SP	KP_FP(1)		
	KPE2FP_SP	KP_FP(2)		
Hours worked, private sector			DLLHP2EFP_SP	DLLHP_FP(-2)
			DLLHP1EFP_SP	DLLHP_FP(-1)
			DLLHP_SP	DLLHP_FP(0)
Average working hour, private	LHP_LP1EFP_SP	LHP_LP_FP(-1)		
			DLLHP_LP_SP	DLLHP_LP_FP(0)
Labour supply	LS1EFP_SP	LS_FP(-1)		
			DLS_SP	DLS_FP(0)
Price, consumption	PBC_PE0FP_SP	PBC_P_FP(0)	DLPBC_SP	DLPBC_FP(0)
Price, private production	PBYPG_PE0FP_SP	PBYPG_P_FP(0)		
Price, private value added			DLPBYP_SP	DLPBYP_FP(0)
Price, investments	PI_PE0FP_SP	PI_P_FP(0)		
Price, imports	PM_PE0FP_SP	PM_P_FP(0)	DLPM_SP	DLPM_FP(0)
Price, exports	PX_PE0FP_SP	PX_P_FP(0)	DLPX_SP	DLPX_FP(0)
Real exchange rate	RERE0FP_SP	RER_FP(0)	DLRER_SP	DLRER_FP(0)
	RERE1FP_SP	RER_FP(1)		
Transfers from government	TRE0FP_SP	TR_FP(0)		
Transfers to government	TRESTE0FP_SP	TREST_FP(0)		
Unemployment rate	U_LS1EFP_SP	U_LS_FP(-1)	DU_LS1EFP_SP	DU_LS_FP(-1)
	U_LSE0FP_SP	U_LS_FP(0)	DU_LS_SP	DU_LS_FP(0)
Real wage	WPE0FP_SP	WP_FP(0)		
	WPE1FP_SP	WP_FP(1)		
	WPE2FP_SP	WP_FP(2)		
Exports	X1EFP_SP	X_FP(-1)	DLX_SP	DLX_FP(0)
GDP	YE0FP_SP	Y_FP(0)		
Disposable income			DLYD1EFP_SP	DLYD_FP(-1)
			DLYD_SP	DLYD_FP(0)
Value added, private	YP2EFP_SP	YP_FP(-2)		
	YP1EFP_SP	YP_FP(-1)		
			DLYP_SP	DLYP_FP(0)
Production, private			DLYPG1EFP_SP	DLYPG_FP(-1)
	YPGE0FP_SP	YPG_FP(0)	DLYPG_SP	DLYPG_FP(0)
	YPGE1FP_SP	YPG_FP(1)		
	YPGE2FP_SP	YPG_FP(2)		

Note. Name syntax (cf. roman numerals; IV = 4, VI = 6):
"nEFP" – Expected value of flex-price counterpart, n no. of years back (lag), n = 1, 2;
"EnFP" – Expected value of flex-price counterpart, n no. of years ahead (lead), n = 0, 1, 2;
"E0FP" is suppressed for differentials.

3. Impulse-response analyses

In this chapter we investigate the dynamic properties of KIMOD 2.0, January 2009, compared to KIMOD 1.0 (Bergvall et al, 2007, ch. 5). Responses to five permanent and five temporary shocks are investigated. Diagrams are plotted in the Appendix. The bold lines in the figures correspond to the responses in KIMOD 2.0 and the thin lines to the "base", which is KIMOD 1.0.

3.1 A permanent productivity shock

(See Appedix pp. 2-5.) The productivity level is permanently increased by one percent (fig. 5). The production possibilities increase, the individuals become richer and increase spending. In KIMOD 2.0 private consumption (fig. 18) responds much slowly than in the previous version of the model. The flex-price models respond almost immediately to the new equilibrium. However, the new sticky price model only responds with about 1/3 of the long-run effect the first year, but overreacts and overshoots the long-run level in year three. Higher productivity requires more capital. Investments (fig. 19) behave as private consumption, with a slow reaction at start, but it then overshoots much more. Exports (fig. 15) develop about similarly with sticky prices as with flexible prices. GDP (fig. 7) summarizes the demand side behaviour, with a slow reaction (KIMOD 2.0) under the first years, followed by overshooting. Since there is no endogenous effect on labour supply, the effects on unemployment and hours worked are modest (fig. 1, 2 and 3).

3.2 A permanent labour supply shock

(See Appendix pp. 6-9.) In the new version, KIMOD 2.0, the individuals do not in general internalize information from permanent shocks at once. Exceptions are made for variables "controlled" by the government, such as government consumption. The reason is that we don't want to introduce uncertainty concerning fiscal policy. Exceptions are also made for labour supply, which is almost[3] exogenous which would generate weird results if permanent shocks were smoothed. The differences in responses are thus relatively small between the versions of the model, and are caused mainly by the recalibration of steady state.

A permanent increase of the labour supply by 1 percent is fully appreciated after one year (fig. 1). Hours worked (fig. 3) reacts more slowly and unemployment in relative terms increases (fig. 2). The peak in the unemployment rate influences the consumption path, and explains the dip the second year (fig. 18).

3.3 A permanent change to the relative bargaining strength of workers

(See Appendix pp. 10-13.) The impulse in this experiment is to lower the bargaining strength of workers relatively employers, in the Nash-bargaining over wages. The real wage shrinks in the long run (fig. 11), the unemployment rate falls (fig. 2), and hours worked increases (fig. 3). More hours worked tend to increase the marginal productivity of capital. Hence, investments (fig. 19) and the

[3] The labour supply depends only on its own lagged value, equilibrium development, an error correction term and a temporary shock. Hence, no simultaneous variables.

capital stock (fig. 4) increase in the long run. Total factor productivity is unaffected in the long run (fig. 5), but more capital and labour boost production (fig. 6) and GDP (fig. 7).

In KIMOD 2.0, terms of trade are almost unaffected in the long-run (fig. 14), due to recalibration of the real exchange rate equation. Moreover, the separation rate is much higher in the new version of the model (estimated from data) which is an important factor explaining the larger responses with KIMOD 2.0 compared to KIMOD 1.0 (see exports (fig. 15) and consumption (fig. 18)).

3.4 A permanent reduction in the target ratio of government debt to GDP

(See Appendix pp. 14-17.) This is a policy shock. The government decides to decrease the target debt to GDP ratio by one percentage point, that is, increase the net asset to GDP ratio (fig. 21). The ratio of net foreign assets to GDP increases and the real exchange rate appreciates (fig. 13). The elasticity to the real exchange rate is much lower in KIMOD 2.0, as compared to the older version of the model. The terms of trade effect is thus modest (fig. 14). The effects on exports (fig. 15), consumption (fig. 18), and investments (fig. 19) are smaller and, arguably, more realistic in the new version of the model.

3.5 A permanent negative shock to the inflation target

(See Appendix pp. 18-21.) What happens if the inflation target is lowered by one percentage point? It takes about three years to lower the actual inflation to the new target (fig. 9), which is much longer than in the previous version of the model. The change in nominal interest is about the same in the two models (fig. 12). The aim is to increase the real interest rate to dampen consumption and investments in the short run. There are no real effects in the long run, as we would expect.

3.6 A temporary nominal wage shock

(See Appendix pp. 22-25.) Nominal wage is one percent higher than expected for one year (fig 10). The response on prices is slower (fig. 9); therefore the real wage rate increases (fig. 11). Employment and hours worked decrease (fig. 2 and 3) and production falls. The central bank raises the interest rate (fig. 12) and demand falls after a while (fig. 7), which pushes production even further down. KIMOD 2.0 has a greater effect on consumption, compared to KIMOD 1.0. There is an initial positive effect on private consumption (fig. 18) in the new model due to a change in the timing of disposable income and consumption. The higher nominal wage now has a short positive effect on consumption, after which the higher interest rate and the higher unemployment ratio push consumption back.

3.7 A temporary shock to the exchange rate

(See Appendix pp. 26-29.) The nominal exchange rate depreciates by one percent (fig. 13). This causes terms of trade to fall (fig. 14), and exports increase more than imports (fig. 15, 16 and 17). The nominal exchange rate affects all prices, to the extent that the good is imported. In particular, imported investment goods become more expensive and capital formation weakens (fig. 19 and 4). The elasticity between the exchange rate and investment is higher in KIMOD 2.0 than in KIMOD

1.0. The magnitude of the effect on private consumption is small (fig. 18). The effect on net exports is higher than that on investments. The output gap becomes positive, as well as the inflation gap, and both nominal and real interest rate increase. The latter explains the major part of the fall in investment.

3.8 A temporary labour supply shock

(See Appendix pp. 30-33.) Labour supply is suddenly increased by one percent, without this been anticipated (fig. 1). There are only small initial positive effects on demand (fig. 7, 15, 18, 19, and 20). Private production (fig. 6) only increases by about 0.2 percent; hours worked (fig. 3) only by about 0.1 percent. Thus, unemployment (fig. 2) increases initially. This triggers a fall in wages (fig. 10 and 11) which lowers the inflation pressure (fig. 9) and the central bank is able to lower the interest rate. (Notice that the output gap and inflation gap work in different directions in this case (fig. 8).) This stimulates the economy and higher demand can bring back unemployment to the equilibrium level again and exploit the increased labour supply. Firms hire more people which encourage capital formation.

The dynamical effects on output (fig. 7) are smaller in KIMOD 2.0, as compared to KIMOD 1.0.

3.9 A temporary policy shock

(See Appendix pp. 34-37.) The central bank unexpectedly raises the interest rate by 0.5 percentage points, on annual basis (fig. 12). After this initial policy shock, the central bank returns to set the interest rate according to the policy rule. The shock dampens economic activity and inflation falls (fig. 9). The central bank therefore lowers the interest rate in order to bring inflation back to target. Disposable income initially falls and, in KIMOD 2.0, private consumption falls immediately (fig. 18). A higher real interest rate restricts capital formation (fig. 19 and 4), and pushes up the real exchange rate (fig. 13). This causes exports to fall (fig. 15).

The nominal exchange rate responds more rigorously than in KIMOD 1.0 which indicates more (negative) inflation pressure in the new version of the model. The magnitude of the response in consumption is about the same in the two models, whereas the response in investment is larger in KIMOD 2.0.

GDP falls (fig. 7 and 8), private production therefore falls by about 0.60 percent at most (fig. 6). This corresponds to a fall in hours worked (fig. 3) by about 0.35 percent.

3.10 A temporary demand shock

(See Appendix pp. 38-41.) Private consumption is increased by one percent for one period (fig. 18). Due to habit formation, consumption responds positively the second year but then starts to decline and returns to the old equilibrium path after three years. However, compared to KIMOD 1.0, the return is slower. Production is initially in equilibrium and cannot respond immediately to the increased demand; therefore most of the consumption is satisfied by imported goods and services (fig 16.). Moreover, higher domestic demand lowers the possibilities of exporting goods and services (fig. 15). Net exports initially fall, with lower exports and higher imports (fig. 17). Resources are also reallocated from capital formation (fig. 19 and 4). Government consumption is unaffected by

temporary demand shocks (fig. 20). The negative responses of exports and investments are larger in KIMOD 2.0 than in KIMOD 1.0.

GDP (fig. 7) and private production (fig. 6) increases through a Keynesian multiplier mechanism. Private production initially increases by about 0.25 percent and hours worked by about 0.15 percent (fig. 3). Productivity therefore accounts for about 0.10 percent of the production increase. Unemployment (fig. 2) displays an initially perverse response in KIMOD 2.0, but the magnitude is low.

Temporary higher demand opens up a positive output gap (fig. 8), which means that inflation (fig. 9) and nominal wages (fig. 10) increase. The real wage decreases (fig. 11). To keep core inflation at its target rate, the central bank therefore raises the interest rate (fig. 12). A higher real interest rate implies an appreciated (lower) real exhange rate (fig. 13), which is consistent with the drop in exports (see above) and the higher terms-of-trade (fig. 14). A higher real interest also explains some of the response in investments.

References

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Appendix

KIMOD

impulse – response

Permanent shocks

1. 1 percent higher productivity (AH)

2. 1 percent higher labour supply (LS)

3. Lower bargain strength of workers (MY)

4. 1 percentage point lower government debt to GDP ratio (BG)

5. 1 percentage point lower inflation target (INFTAR)

Temporary shocks

6. 1 percent higher nominal wage (NW)

7. 1 percent depreciation of the nominal exchange rate (NER)

8. 1 percent higher labour supply (TLS)

9. 0.5 percentage points higher nominal interest rate (NR)

10. 1 percent higher private consumption (C)

Current model is KIMOD 2.0.0

"Base" is KIMOD 1.0

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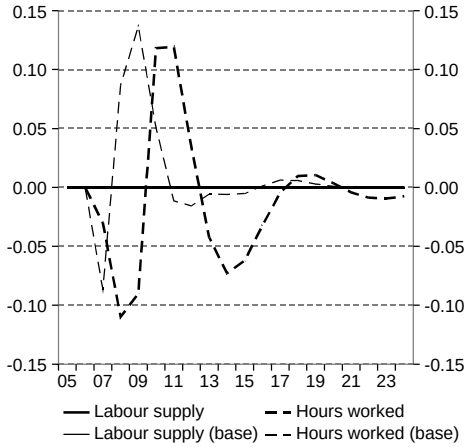
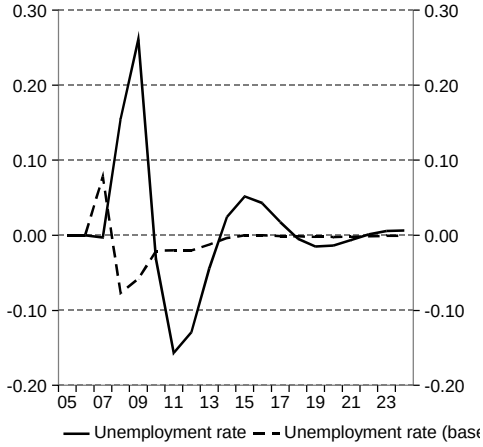
1 Labour market (LS,LH)
Responses in percent



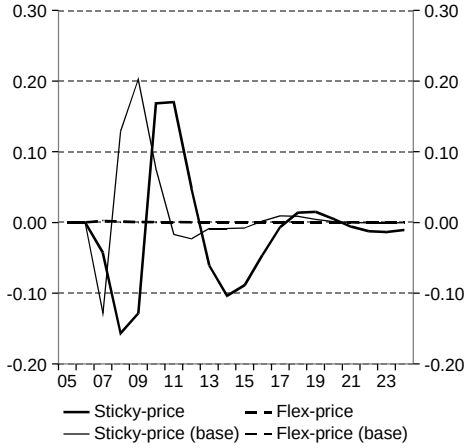
Source: NIER.

2 Unemployment (U_LS)
Responses in percentage points



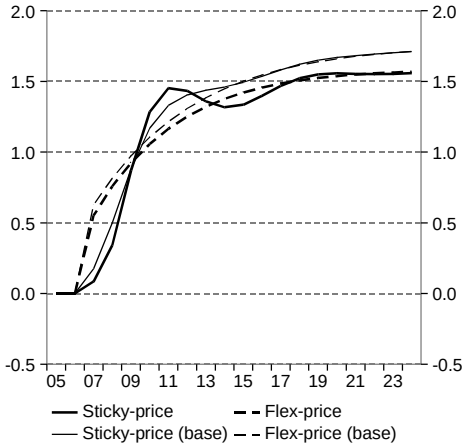
Source: NIER.

3 Hours worked, private (LHP)
Responses in percent



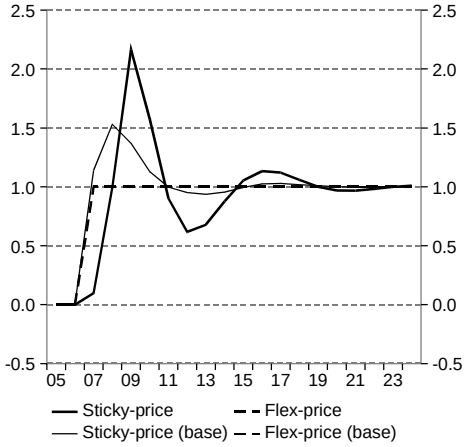
Source: NIER.

4 Capital stock (KP)
Responses in percent



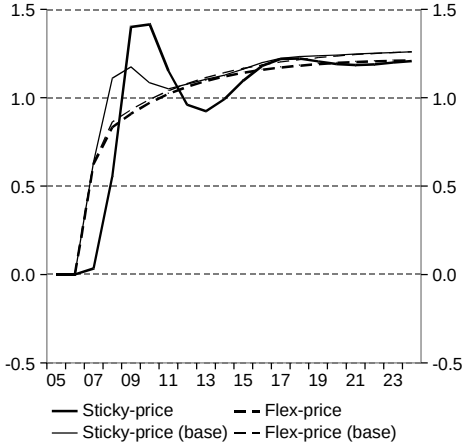
Source: NIER.

5 Productivity, TFP (AH)
Responses in percent



Source: NIER.

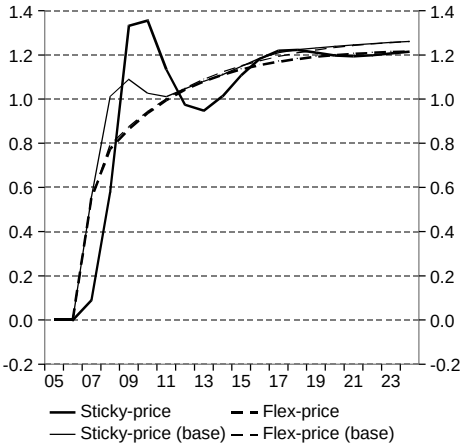
6 Production, private (YPG)
Responses in percent



Source: NIER.

7 GDP, real (Y)

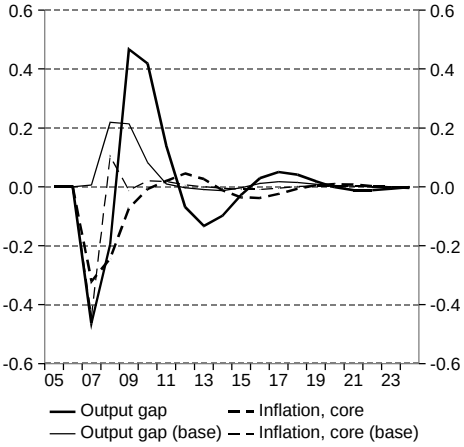
Responses in percent



Source: NIER.

8 Output gap & core inflation

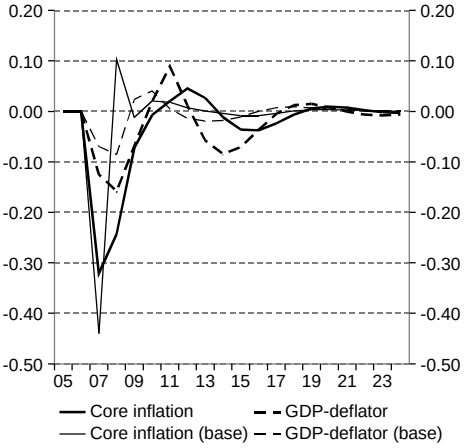
Responses in percentage points



Source: NIER.

9 Inflation (CORE,P)

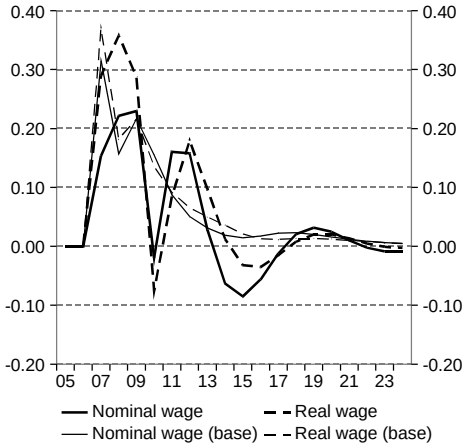
Responses in percentage points



Source: NIER.

10 Nominal & real wage (NW,WP)

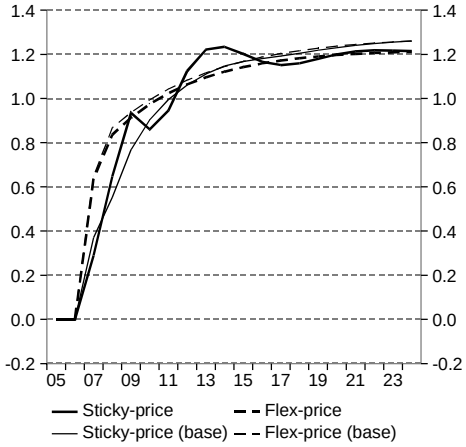
Annual percentage change, responses



Source: NIER.

11 Real wage rate (WP)

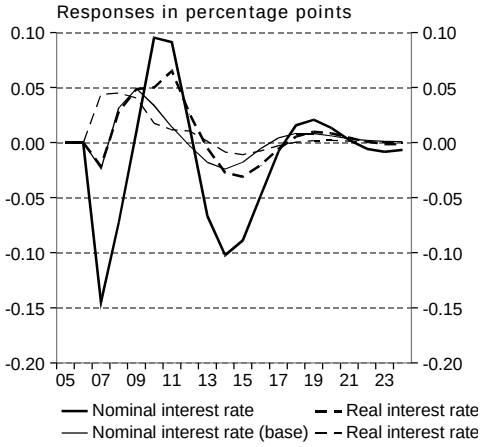
Responses in percent



Source: NIER.

12 Nominal & real interest rate (NR,R)

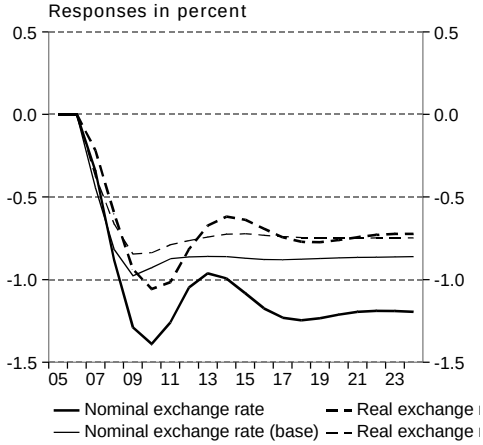
Responses in percentage points



Source: NIER.

13 Nominal & real exchange rate (NER,RER)

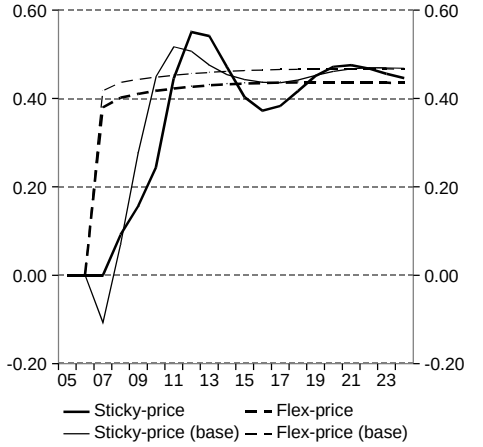
Responses in percent



Source: NIER.

14 Terms-of-trade (PX/PM)

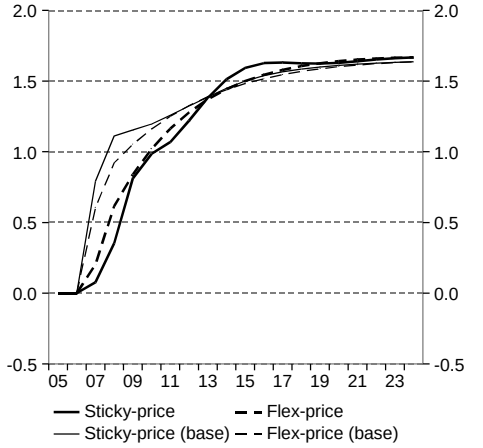
Responses in percent



Source: NIER.

15 Exports (X)

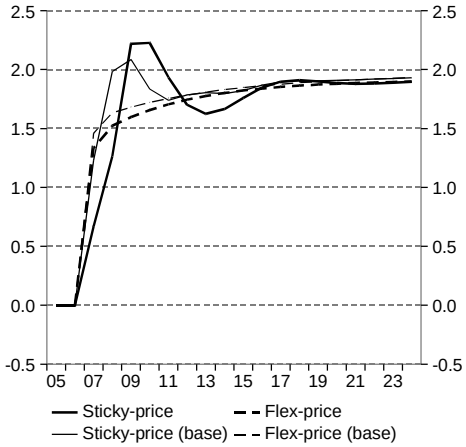
Responses in percent



Source: NIER.

16 Imports (M)

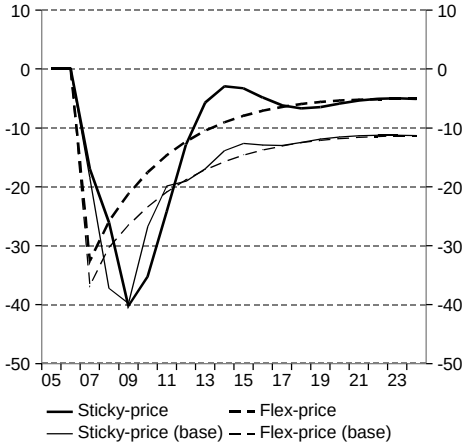
Responses in percent



Source: NIER.

17 Net exports (XNET)

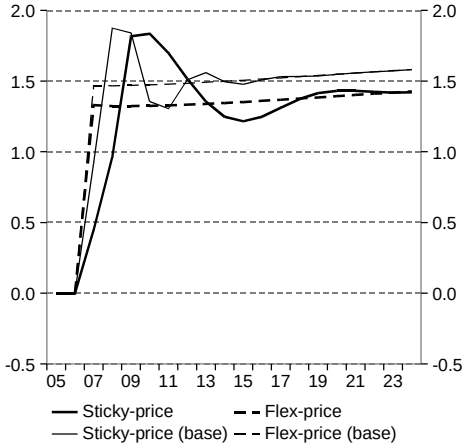
Responses in percent



Source: NIER.

18 Private consumption (C)

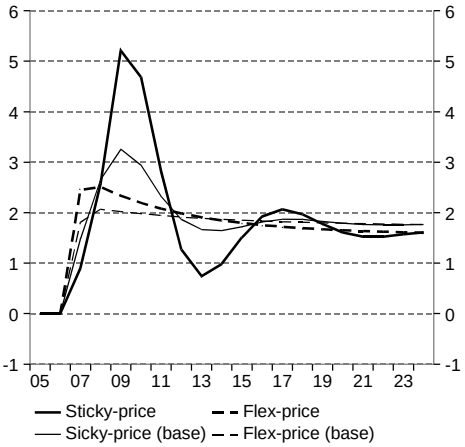
Responses in percent



Source: NIER.

19 Investment (I)

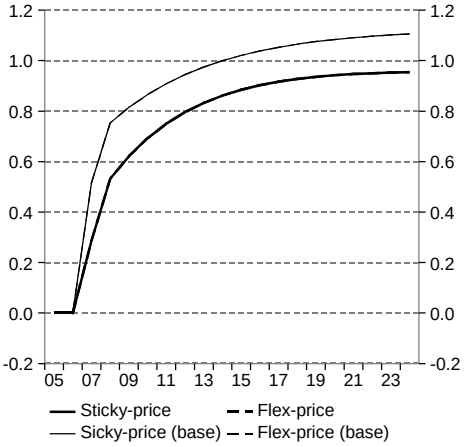
Responses in percent



Source: NIER.

20 Government consumption (G)

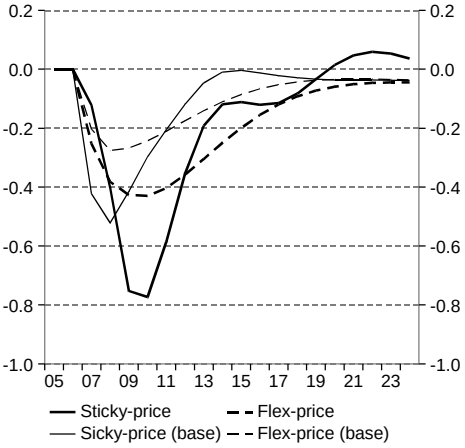
Responses in percent



Source: NIER.

21 Gov. assets to GDP ratio (BG/Y)

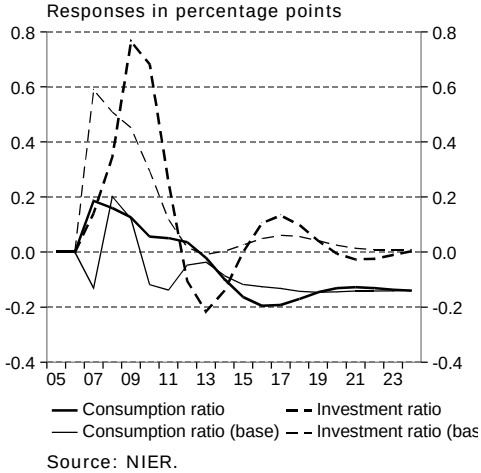
Responses in percentage points



Source: NIER.

22 Consumption & investment, GDP ratios, current prices

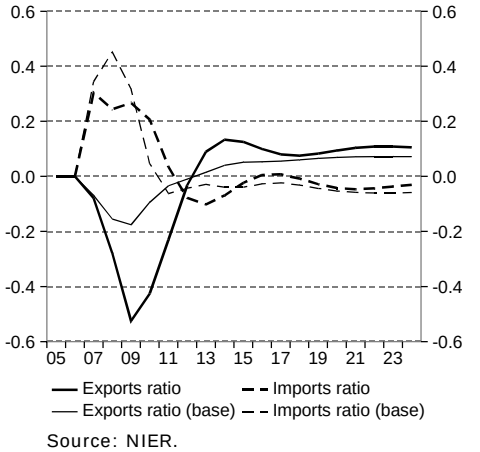
Responses in percentage points



Source: NIER.

23 Exports & imports, GDP ratios, current prices

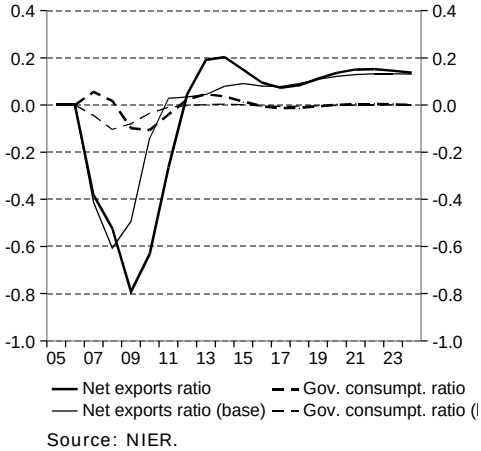
Responses in percentage points



Source: NIER.

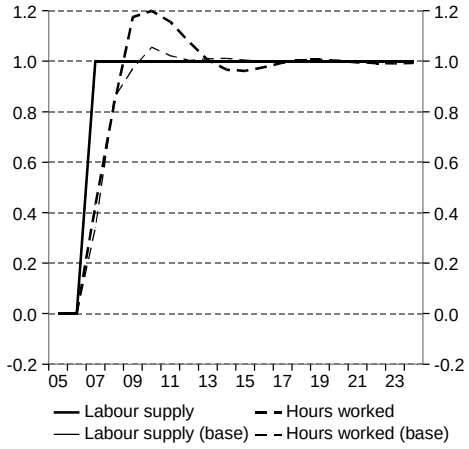
24 Net exports & gov. consumpt., GDP ratios, current prices

Responses in percentage points



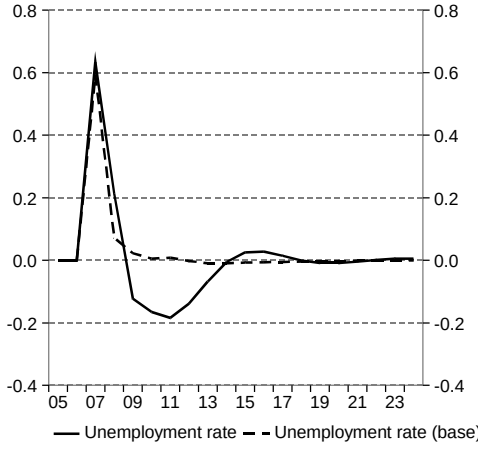
Source: NIER.

1 Labour market (LS,LH)
Responses in percent



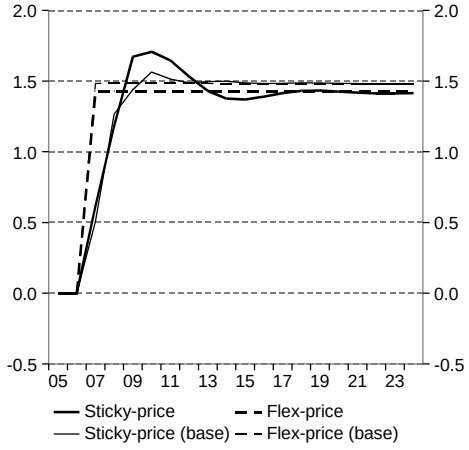
Source: NIER.

2 Unemployment (U_LS)
Responses in percentage points



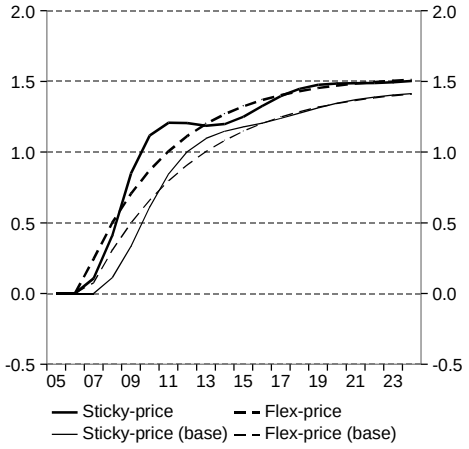
Source: NIER.

3 Hours worked, private (LHP)
Responses in percent



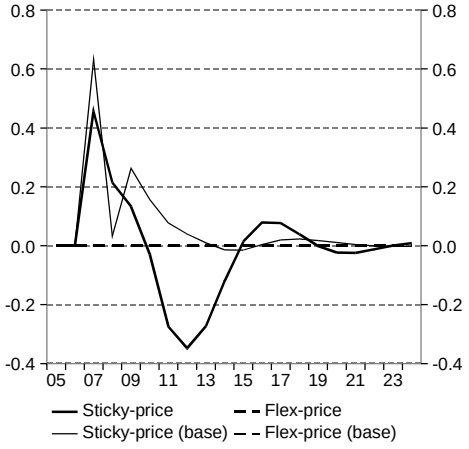
Source: NIER.

4 Capital stock (KP)
Responses in percent



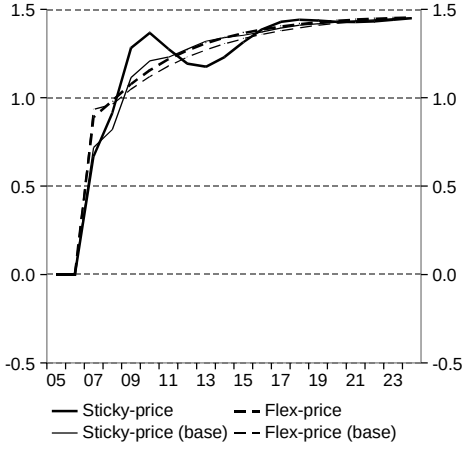
Source: NIER.

5 Productivity, TFP (AH)
Responses in percent



Source: NIER.

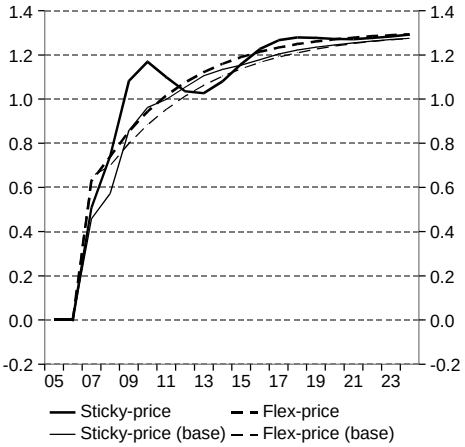
6 Production, private (YPG)
Responses in percent



Source: NIER.

7 GDP, real (Y)

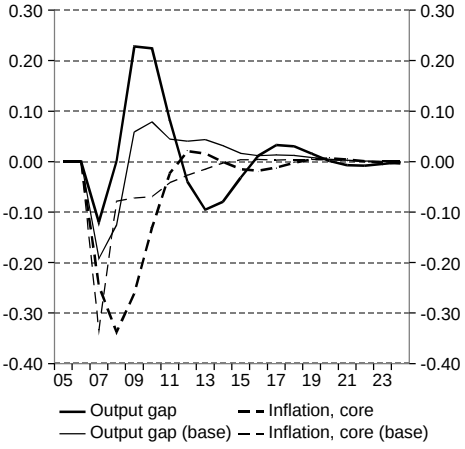
Responses in percent



Source: NIER.

8 Output gap & core inflation

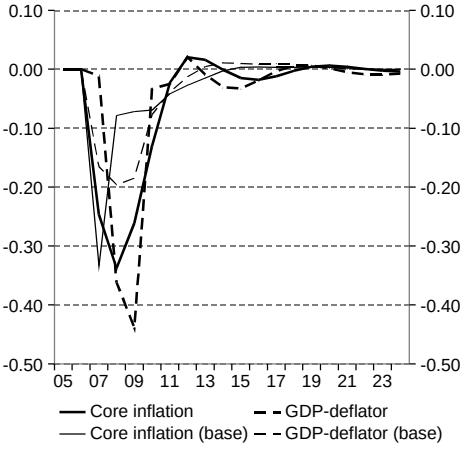
Responses in percentage points



Source: NIER.

9 Inflation (CORE,P)

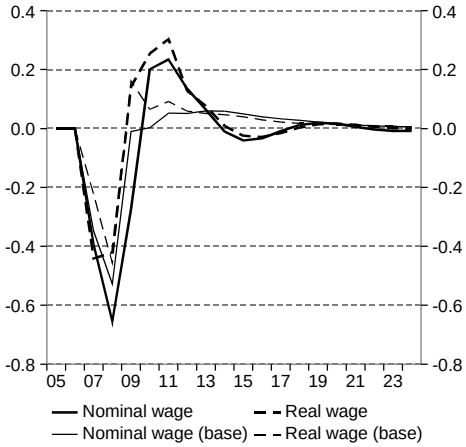
Responses in percentage points



Source: NIER.

10 Nominal & real wage (NW,WP)

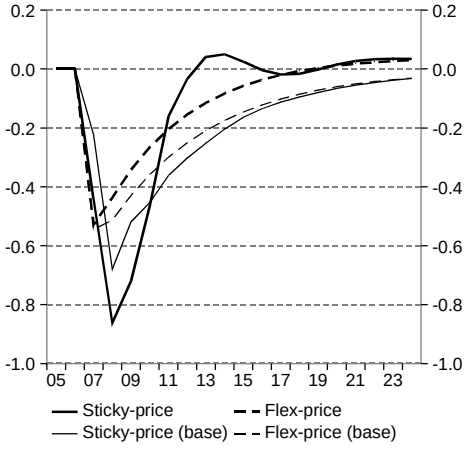
Annual percentage change, responses



Source: NIER.

11 Real wage rate (WP)

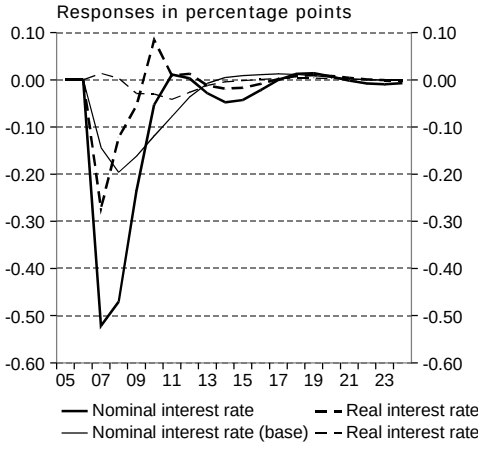
Responses in percent



Source: NIER.

12 Nominal & real interest rate (NR,R)

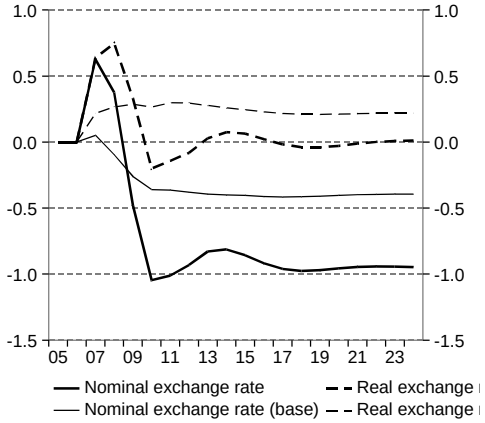
Responses in percentage points



Source: NIER.

13 Nominal & real exchange rate (NER,RER)

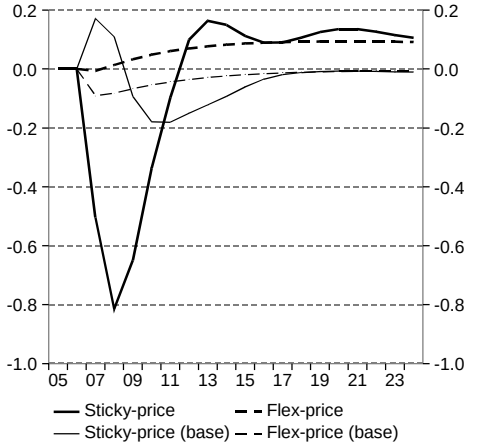
Responses in percent



Source: NIER.

14 Terms-of-trade (PX/PM)

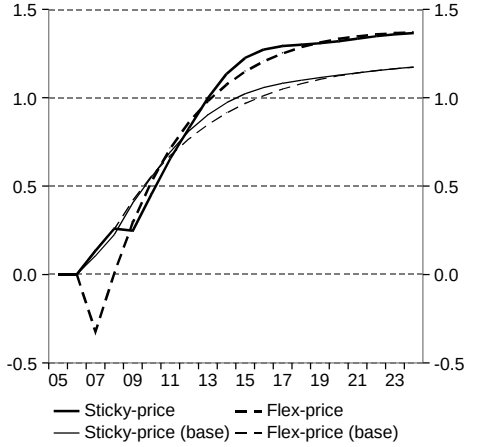
Responses in percent



Source: NIER.

15 Exports (X)

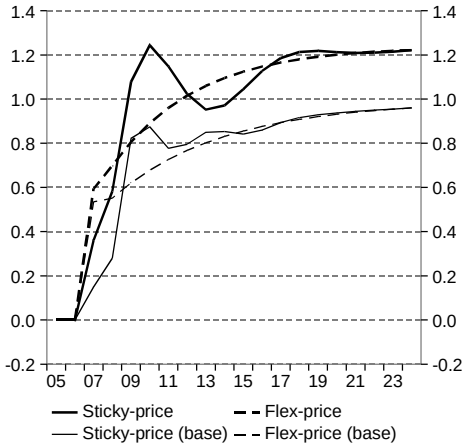
Responses in percent



Source: NIER.

16 Imports (M)

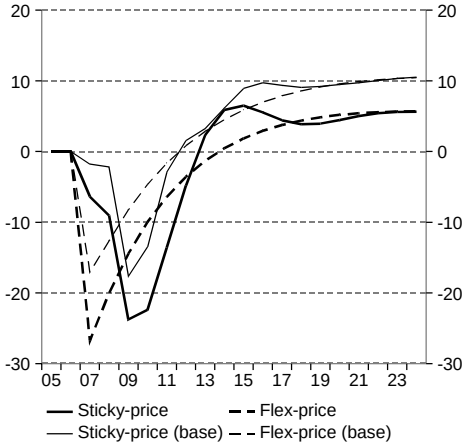
Responses in percent



Source: NIER.

17 Net exports (XNET)

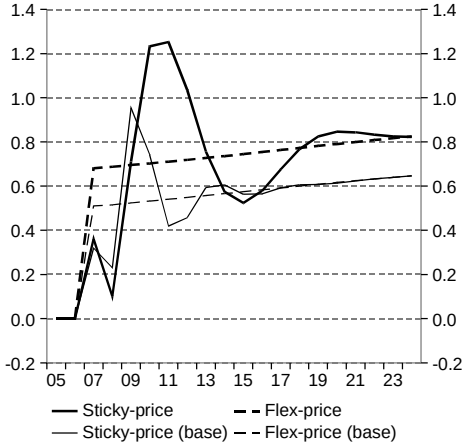
Responses in percent



Source: NIER.

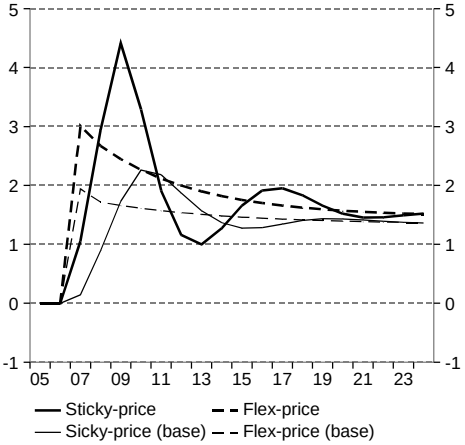
18 Private consumption (C)

Responses in percent



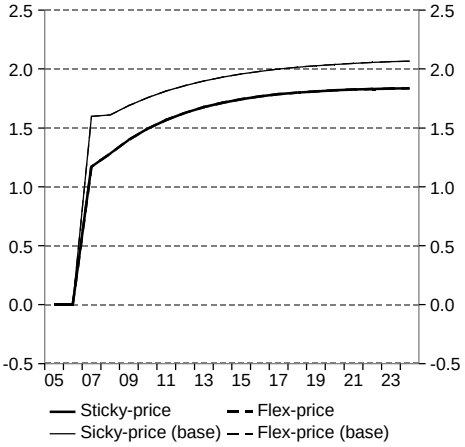
Source: NIER.

19 Investment (I)
Responses in percent



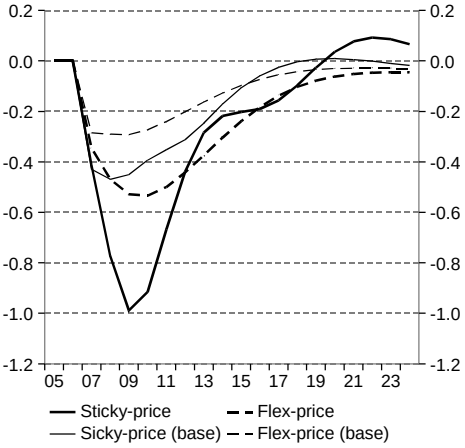
Source: NIER.

20 Government consumption (G)
Responses in percent



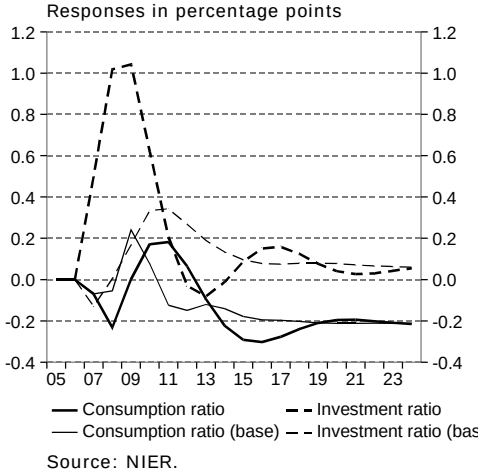
Source: NIER.

21 Gov. assets to GDP ratio (BG/Y)
Responses in percentage points



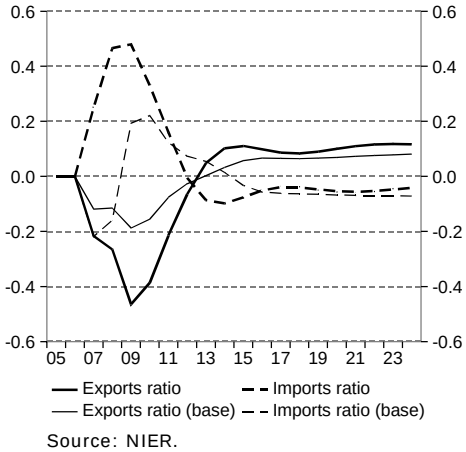
Source: NIER.

22 Consumption & investment, GDP ratios, current prices
Responses in percentage points



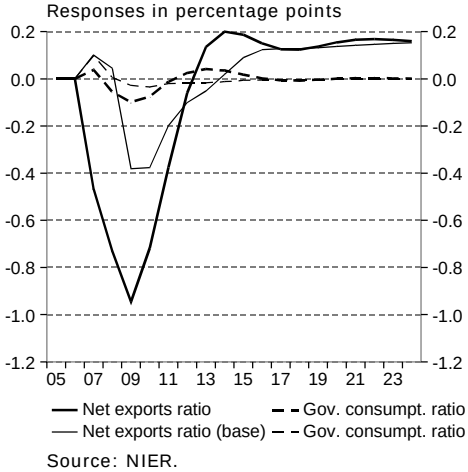
Source: NIER.

23 Exports & imports, GDP ratios, current prices
Responses in percentage points



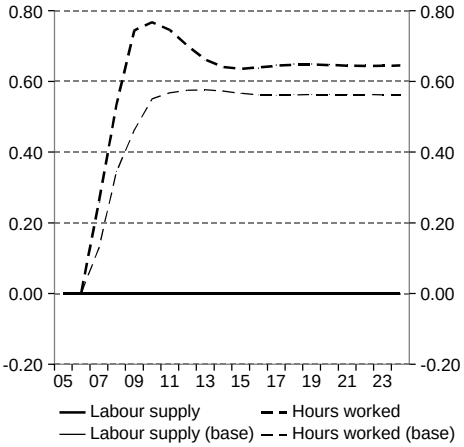
Source: NIER.

24 Net exports & gov. consumpt., GDP ratios, current prices
Responses in percentage points



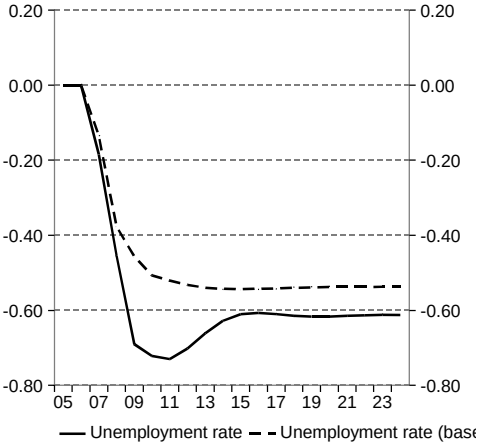
Source: NIER.

1 Labour market (LS,LH)
Responses in percent



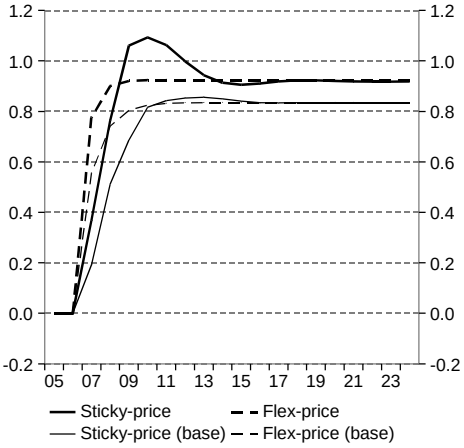
Source: NIER.

2 Unemployment (U_LS)
Responses in percentage points



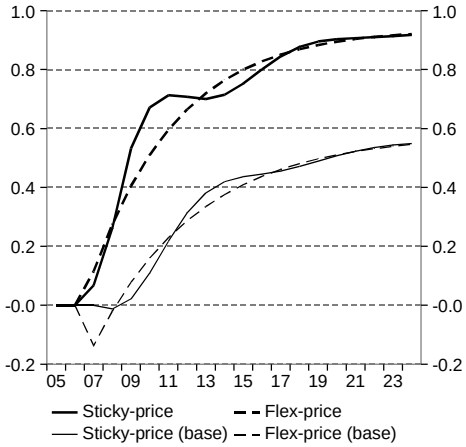
Source: NIER.

3 Hours worked, private (LHP)
Responses in percent



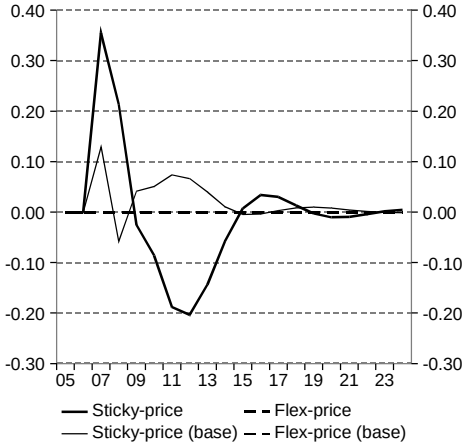
Source: NIER.

4 Capital stock (KP)
Responses in percent



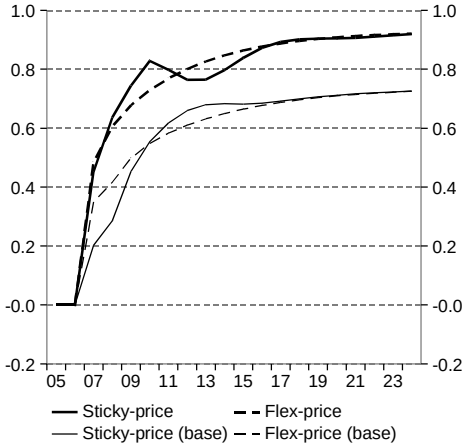
Source: NIER.

5 Productivity, TFP (AH)
Responses in percent



Source: NIER.

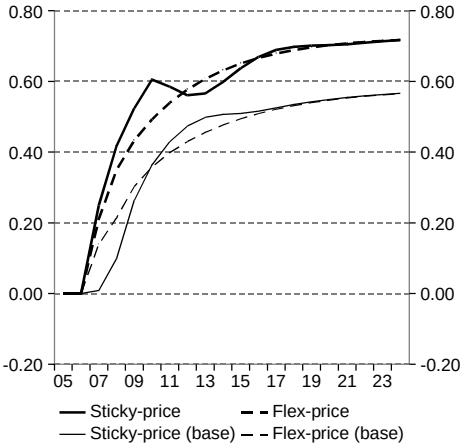
6 Production, private (YPG)
Responses in percent



Source: NIER.

7 GDP, real (Y)

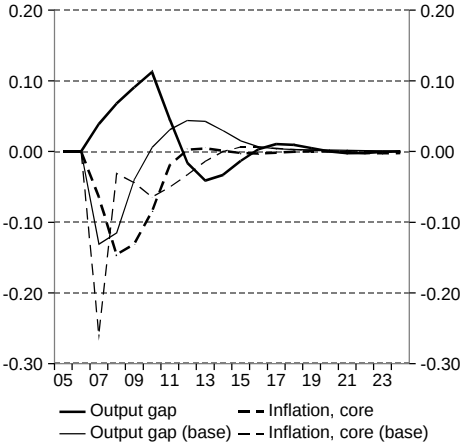
Responses in percent



Source: NIER.

8 Output gap & core inflation

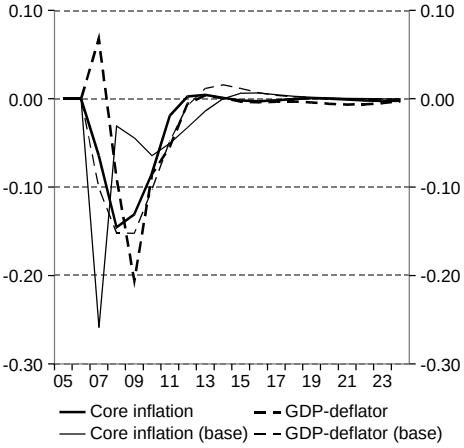
Responses in percentage points



Source: NIER.

9 Inflation (CORE,P)

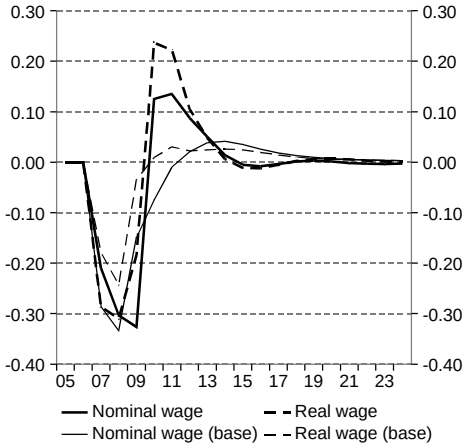
Responses in percentage points



Source: NIER.

10 Nominal & real wage (NW,WP)

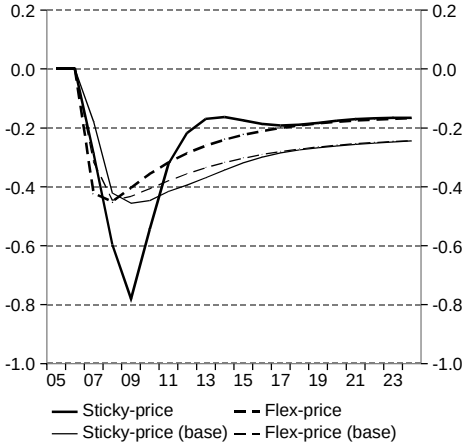
Annual percentage change, responses



Source: NIER.

11 Real wage rate (WP)

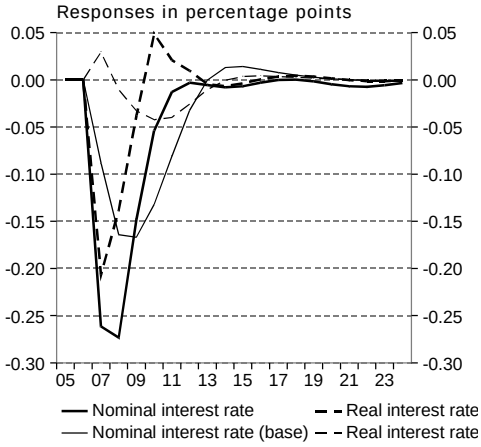
Responses in percent



Source: NIER.

12 Nominal & real interest rate (NR,R)

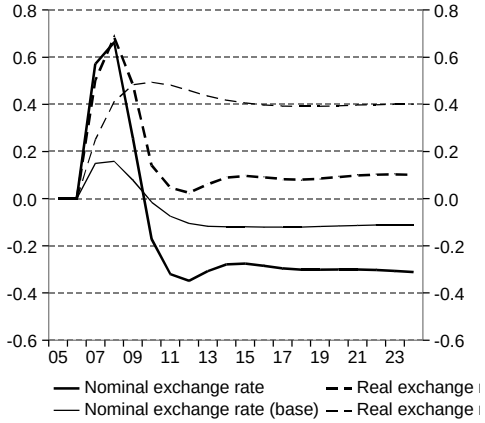
Responses in percentage points



Source: NIER.

13 Nominal & real exchange rate (NER,RER)

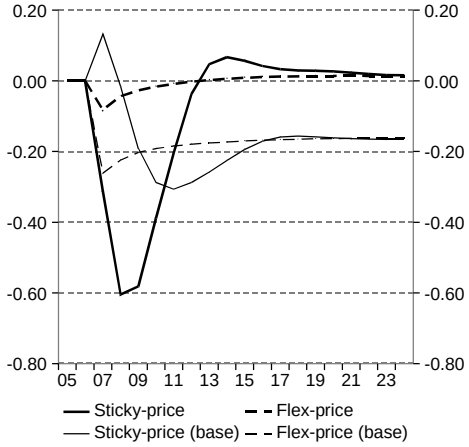
Responses in percent



Source: NIER.

14 Terms-of-trade (PX/PM)

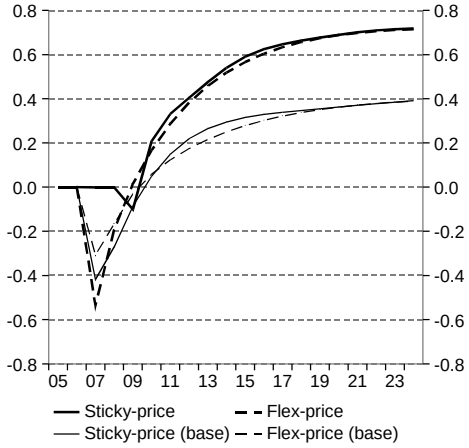
Responses in percent



Source: NIER.

15 Exports (X)

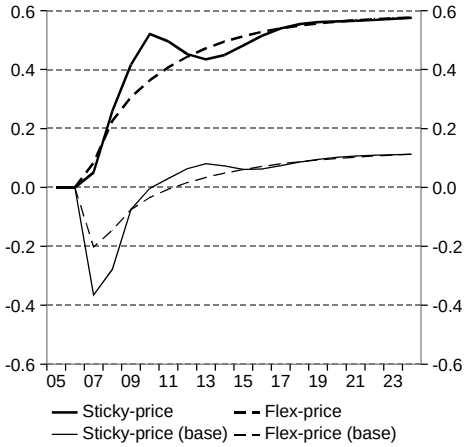
Responses in percent



Source: NIER.

16 Imports (M)

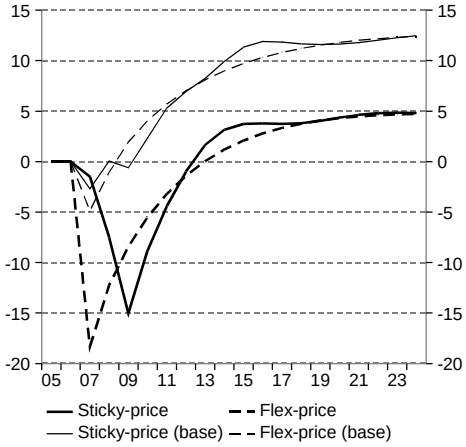
Responses in percent



Source: NIER.

17 Net exports (XNET)

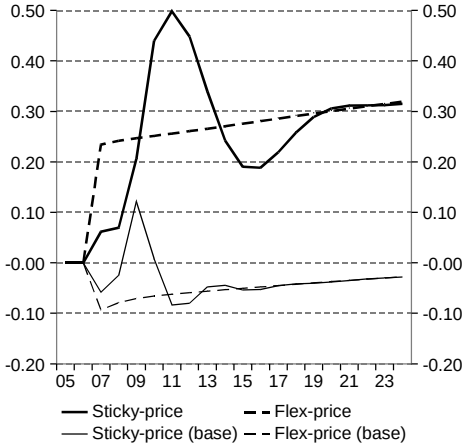
Responses in percent



Source: NIER.

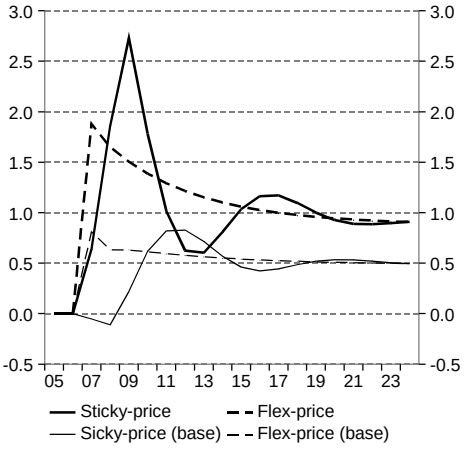
18 Private consumption (C)

Responses in percent



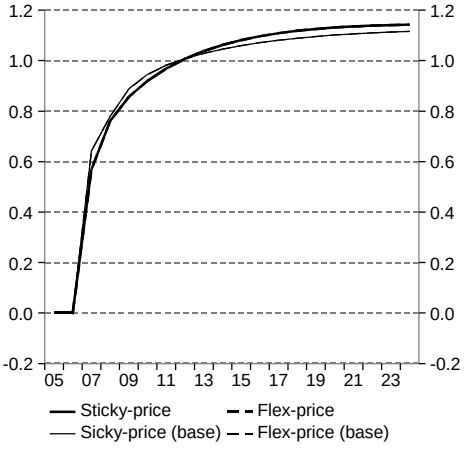
Source: NIER.

19 Investment (I)
Responses in percent



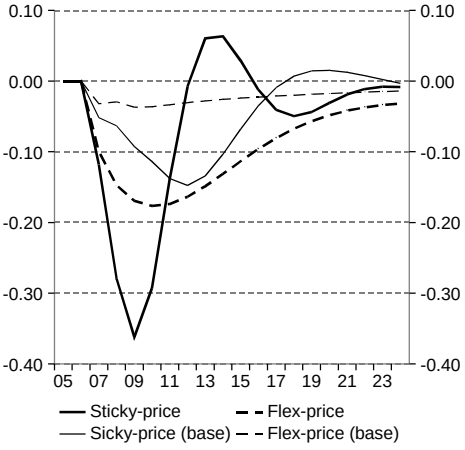
Source: NIER.

20 Government consumption (G)
Responses in percent



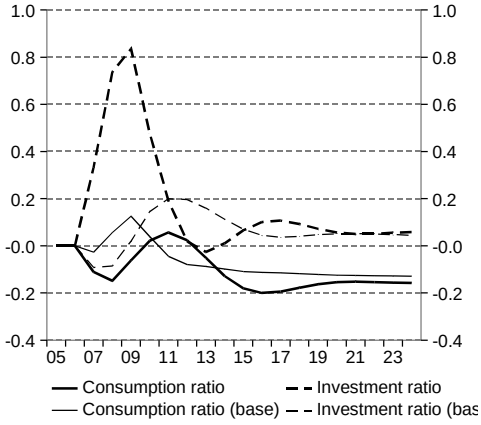
Source: NIER.

21 Gov. assets to GDP ratio (BG/Y
Responses in percentage points



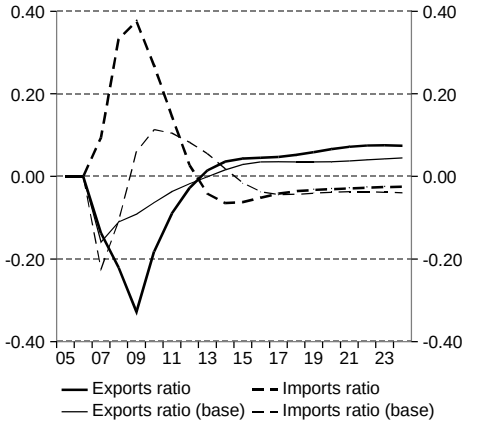
Source: NIER.

22 Consumption & investment, GDP ratios, current prices
Responses in percentage points



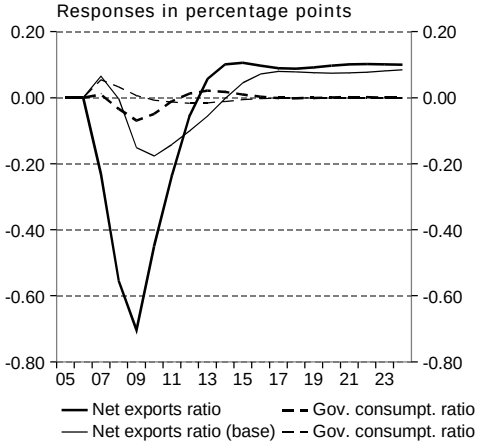
Source: NIER.

23 Exports & imports, GDP ratios, current prices
Responses in percentage points



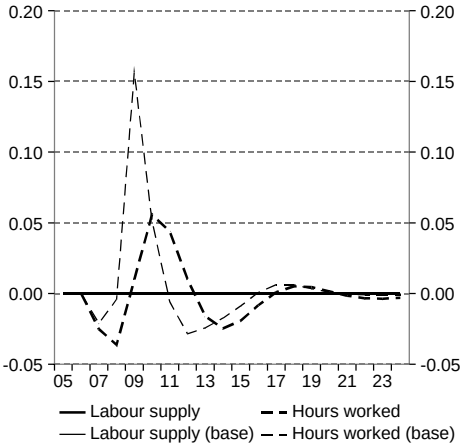
Source: NIER.

24 Net exports & gov. consumpt., GDP ratios, current prices
Responses in percentage points



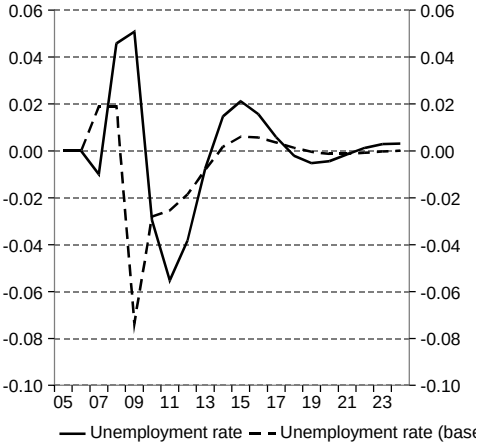
Source: NIER.

1 Labour market (LS,LH)
Responses in percent



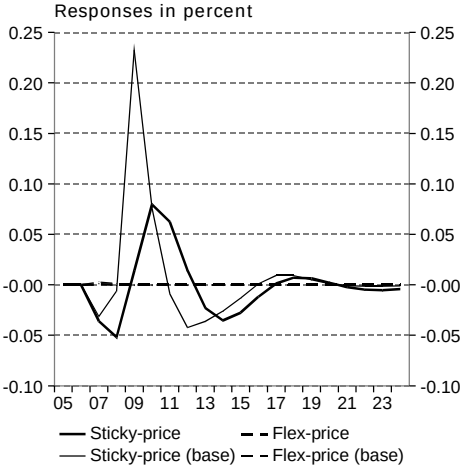
Source: NIER.

2 Unemployment (U_LS)
Responses in percentage points



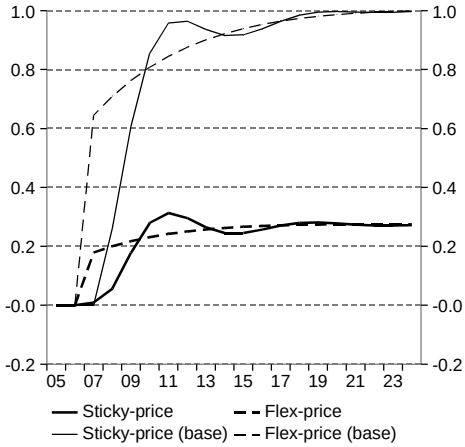
Source: NIER.

3 Hours worked, private (LHP)
Responses in percent



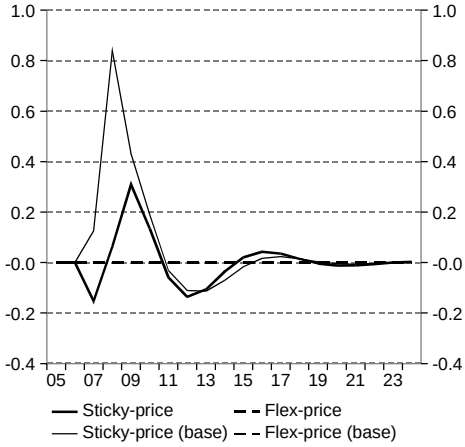
Source: NIER.

4 Capital stock (KP)
Responses in percent



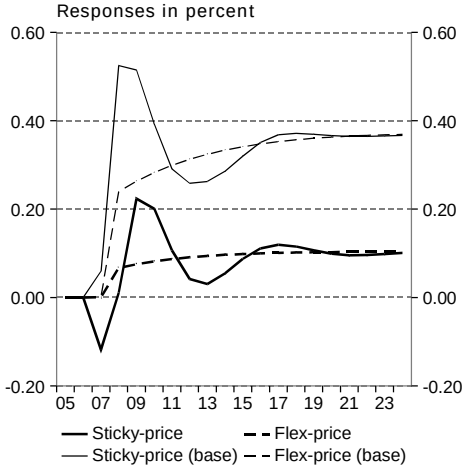
Source: NIER.

5 Productivity, TFP (AH)
Responses in percent



Source: NIER.

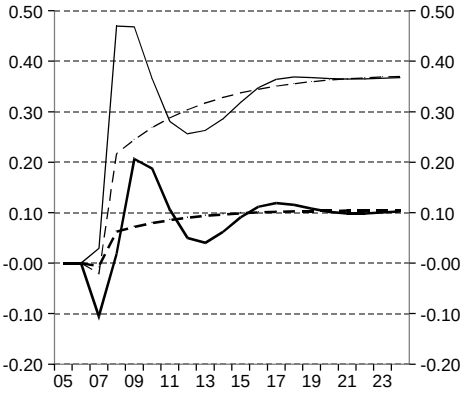
6 Production, private (YPG)
Responses in percent



Source: NIER.

7 GDP, real (Y)

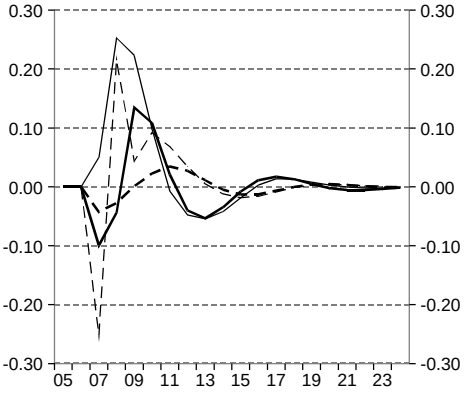
Responses in percent



Source: NIER.

8 Output gap & core inflation

Responses in percentage points



Source: NIER.

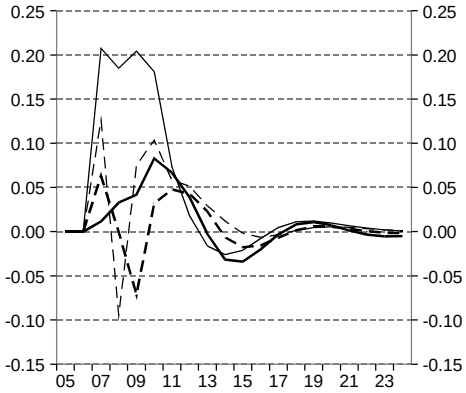
9 Inflation (CORE,P)

Responses in percentage points

Source: NIER.

10 Nominal & real wage (NW,WP)

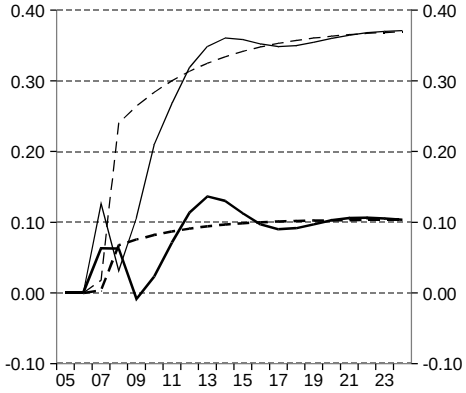
Annual percentage change, responses



Source: NIER.

11 Real wage rate (WP)

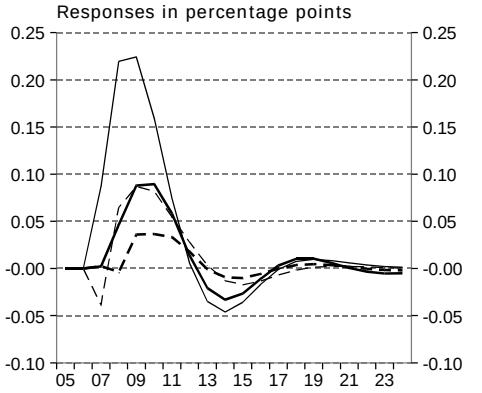
Responses in percent



Source: NIER.

12 Nominal & real interest rate (NR,R)

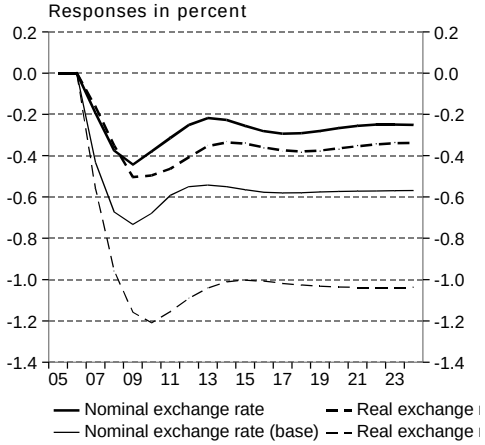
Responses in percentage points



Source: NIER.

13 Nominal & real exchange rate (NER,RER)

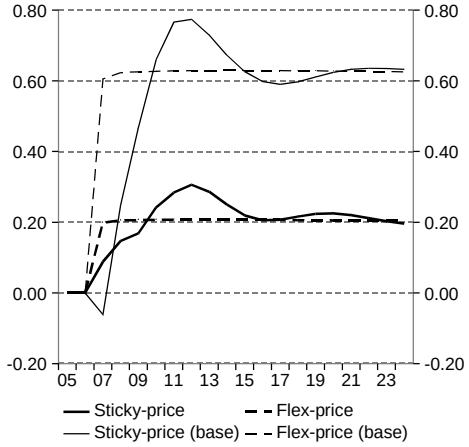
Responses in percent



Source: NIER.

14 Terms-of-trade (PX/PM)

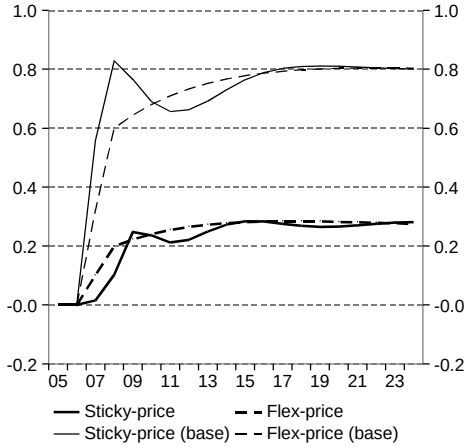
Responses in percent



Source: NIER.

15 Exports (X)

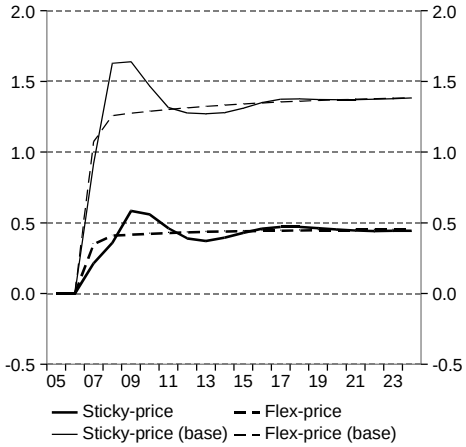
Responses in percent



Source: NIER.

16 Imports (M)

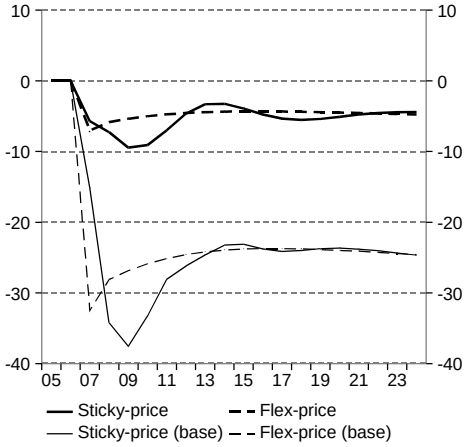
Responses in percent



Source: NIER.

17 Net exports (XNET)

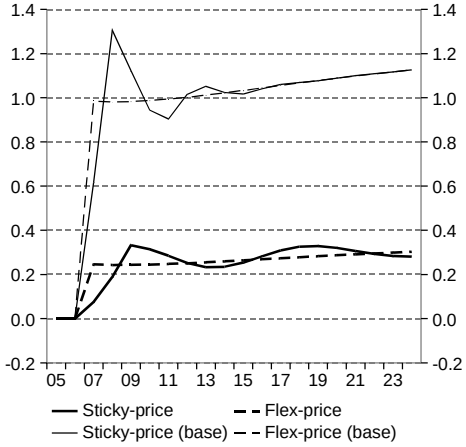
Responses in percent



Source: NIER.

18 Private consumption (C)

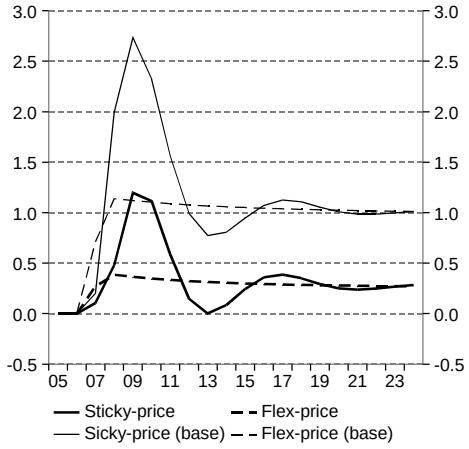
Responses in percent



Source: NIER.

19 Investment (I)

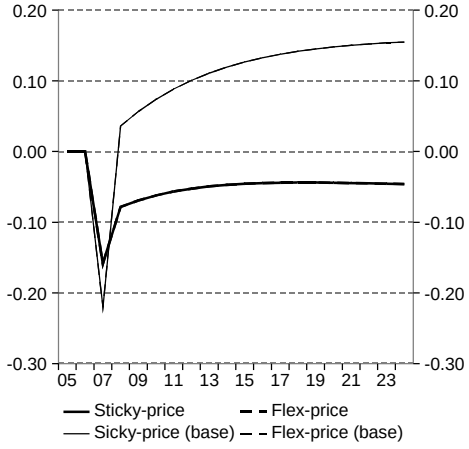
Responses in percent



Source: NIER.

20 Government consumption (G)

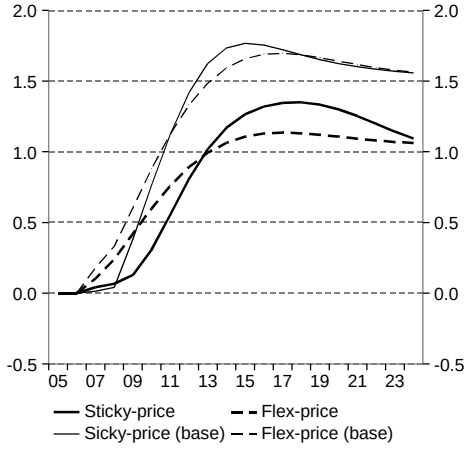
Responses in percent



Source: NIER.

21 Gov. assets to GDP ratio (BG/Y)

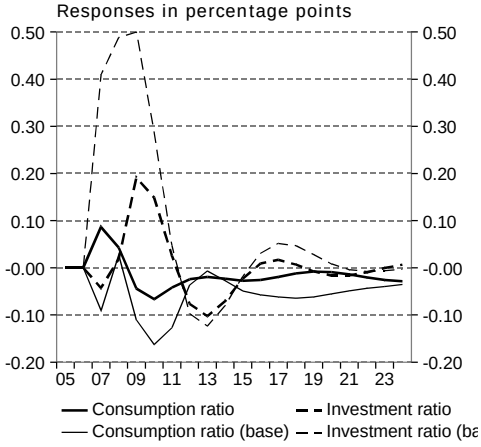
Responses in percentage points



Source: NIER.

22 Consumption & investment, GDP ratios, current prices

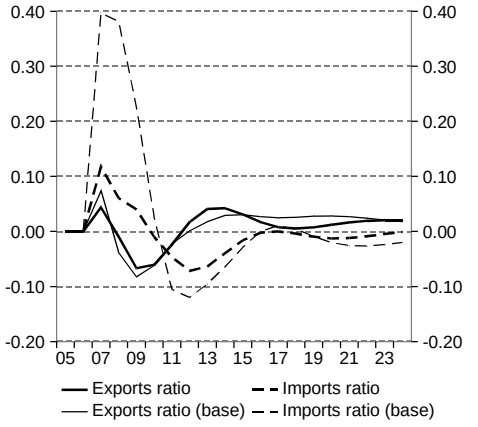
Responses in percentage points



Source: NIER.

23 Exports & imports, GDP ratios, current prices

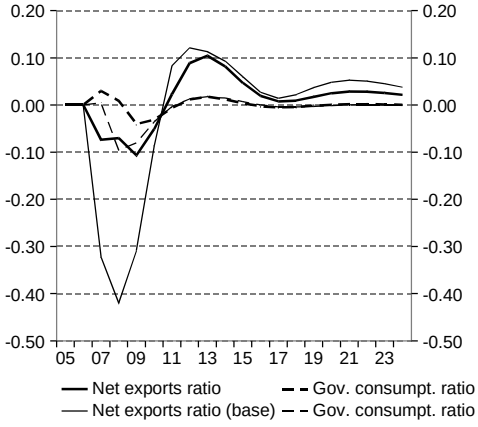
Responses in percentage points



Source: NIER.

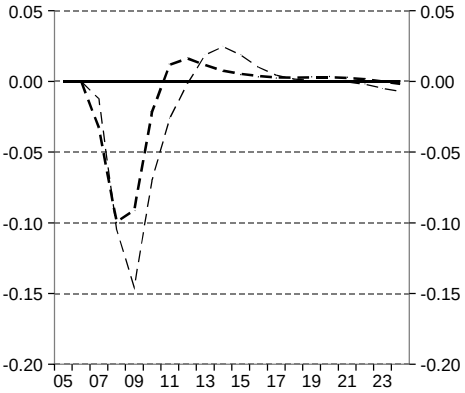
24 Net exports & gov. consumpt., GDP ratios, current prices

Responses in percentage points



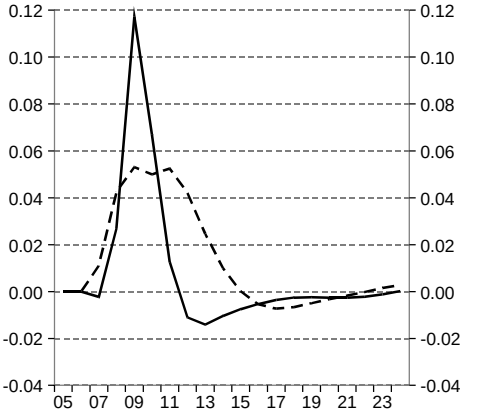
Source: NIER.

1 Labour market (LS,LH)
Responses in percent



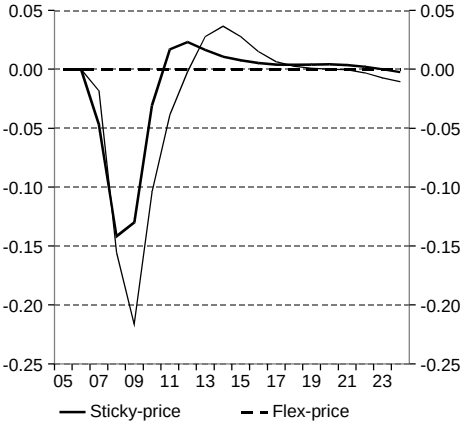
Source: NIER.

2 Unemployment (U_LS)
Responses in percentage points



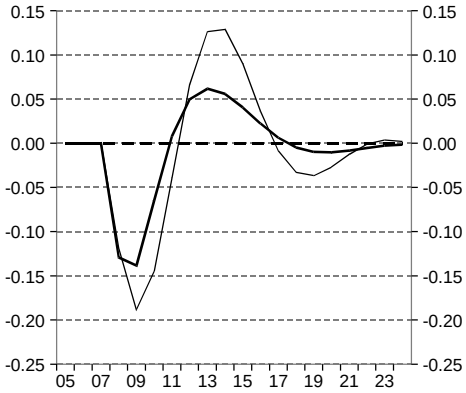
Source: NIER.

3 Hours worked, private (LHP)
Responses in percent



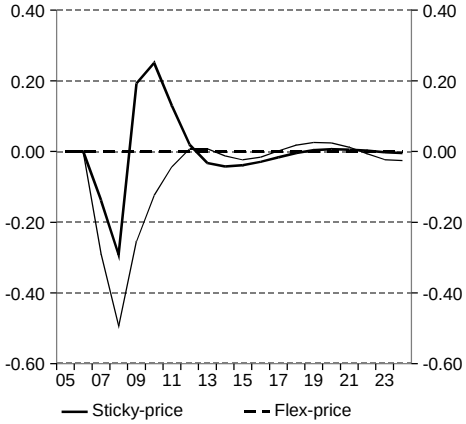
Source: NIER.

4 Capital stock (KP)
Responses in percent



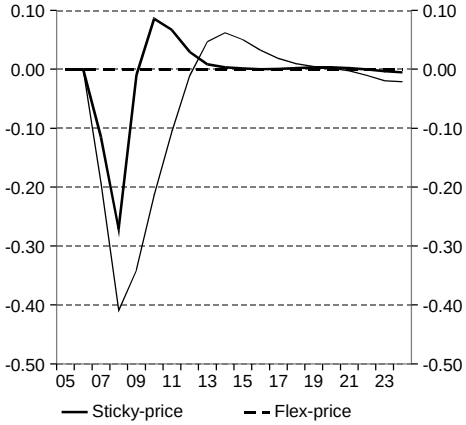
Source: NIER.

5 Productivity, TFP (AH)
Responses in percent



Source: NIER.

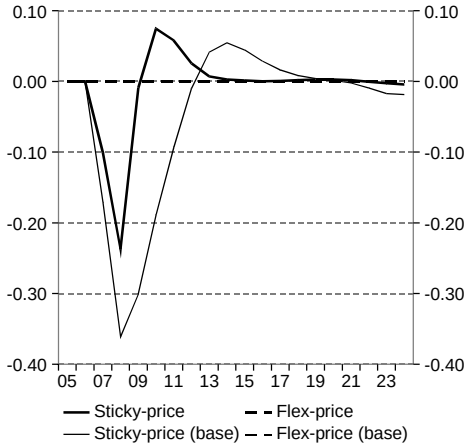
6 Production, private (YPG)
Responses in percent



Source: NIER.

7 GDP, real (Y)

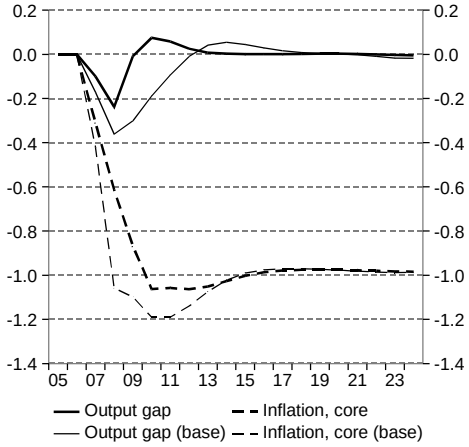
Responses in percent



Source: NIER.

8 Output gap & core inflation

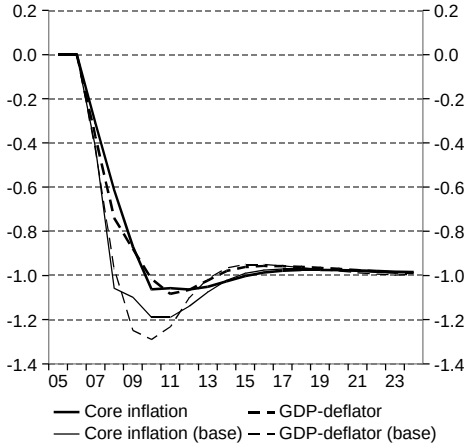
Responses in percentage points



Source: NIER.

9 Inflation (CORE,P)

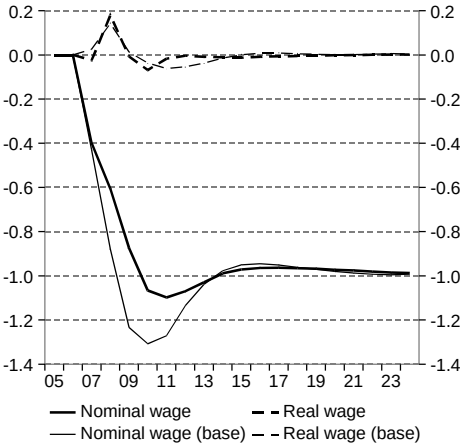
Responses in percentage points



Source: NIER.

10 Nominal & real wage (NW,WP)

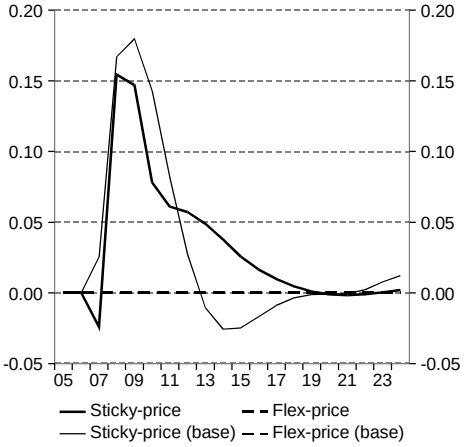
Annual percentage change, responses



Source: NIER.

11 Real wage rate (WP)

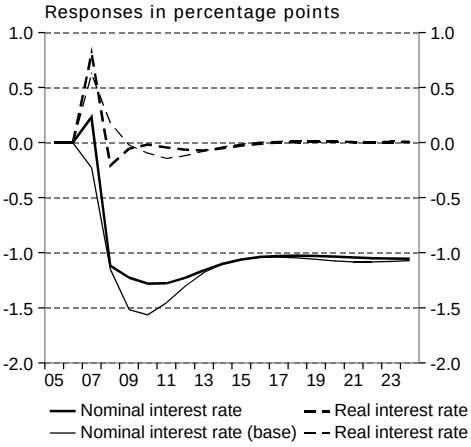
Responses in percent



Source: NIER.

12 Nominal & real interest rate (NR,R)

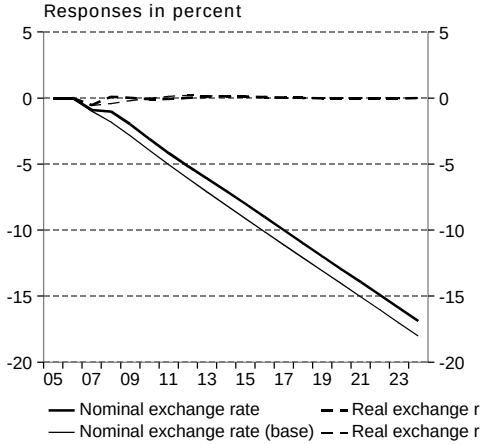
Responses in percentage points



Source: NIER.

13 Nominal & real exchange rate (NER,RER)

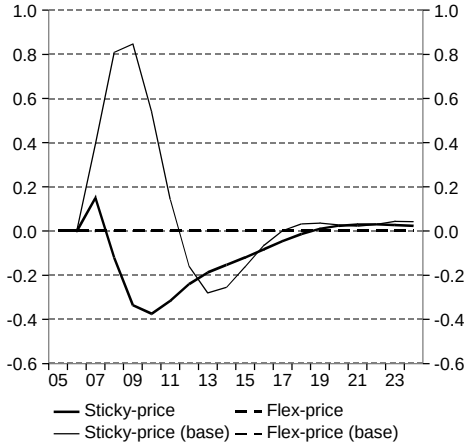
Responses in percent



Source: NIER.

14 Terms-of-trade (PX/PM)

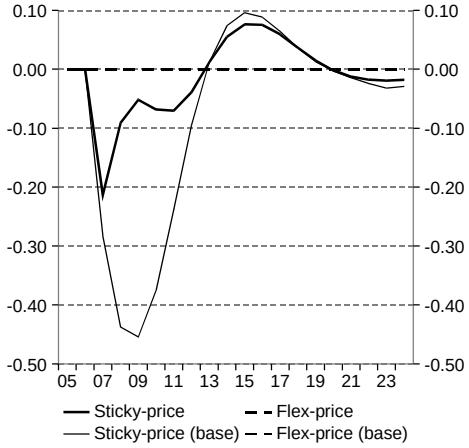
Responses in percent



Source: NIER.

15 Exports (X)

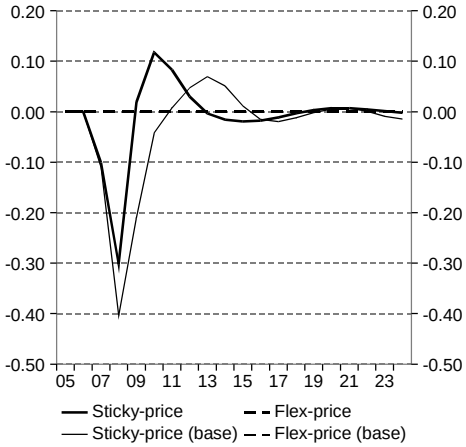
Responses in percent



Source: NIER.

16 Imports (M)

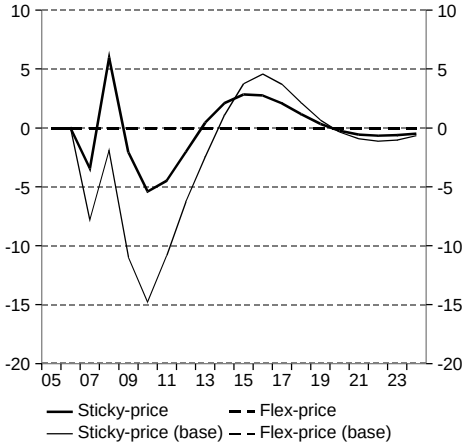
Responses in percent



Source: NIER.

17 Net exports (XNET)

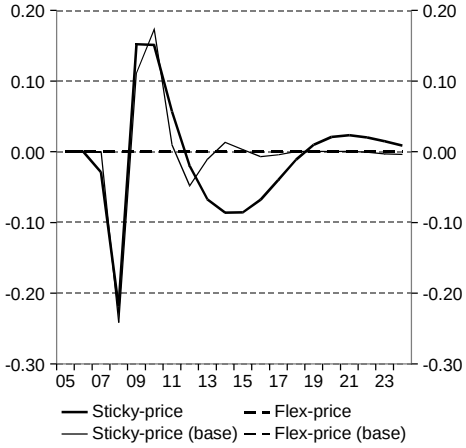
Responses in percent



Source: NIER.

18 Private consumption (C)

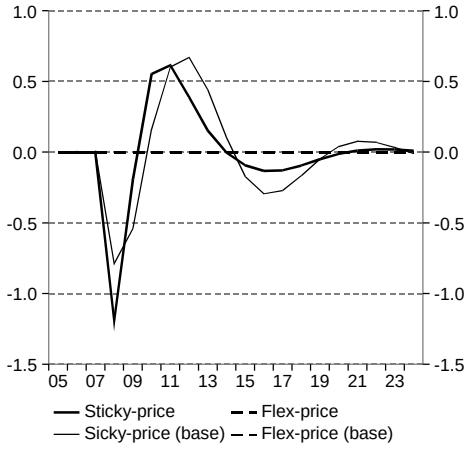
Responses in percent



Source: NIER.

19 Investment (I)

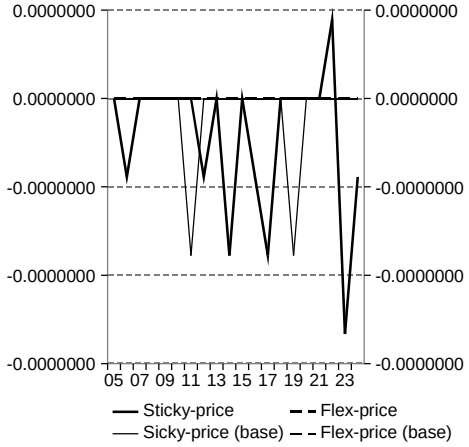
Responses in percent



Source: NIER.

20 Government consumption

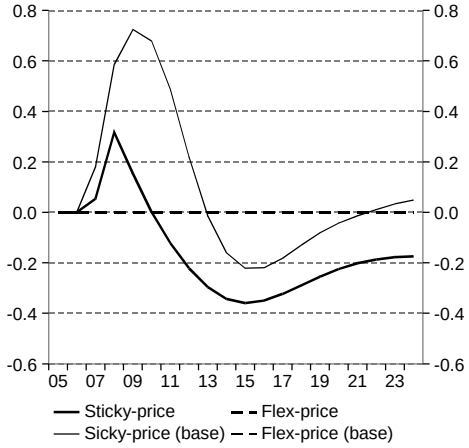
Responses in percent



Source: NIER.

21 Gov. assets to GDP ratio (BG/Y)

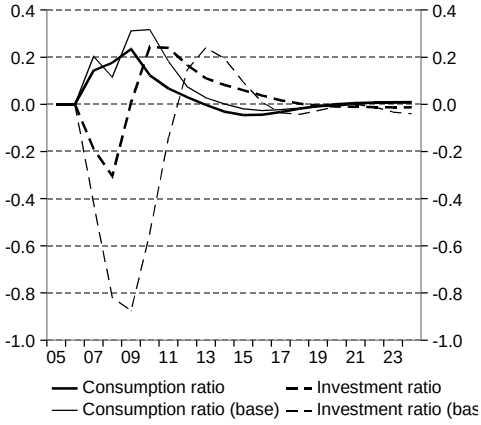
Responses in percentage points



Source: NIER.

22 Consumption & investment, GDP ratios, current prices

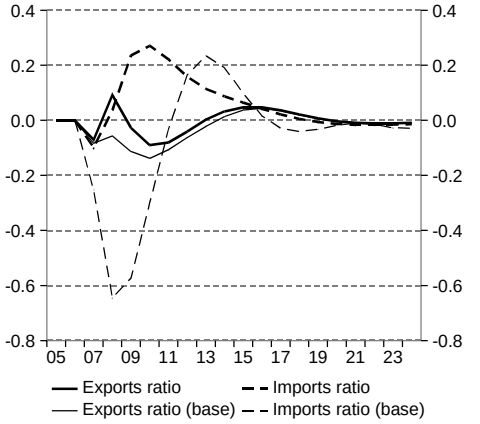
Responses in percentage points



Source: NIER.

23 Exports & imports, GDP ratios, current prices

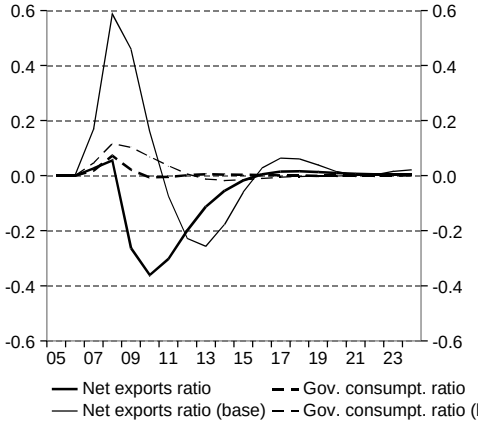
Responses in percentage points



Source: NIER.

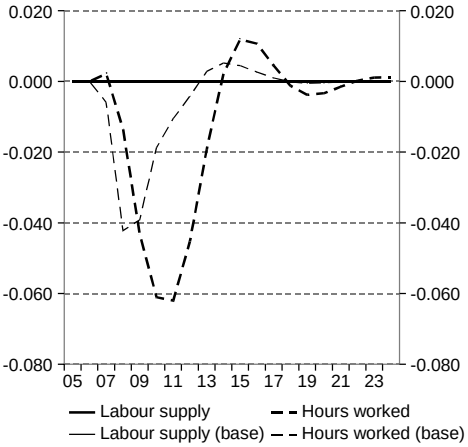
24 Net exports & gov. consumpt., GDP ratios, current prices

Responses in percentage points



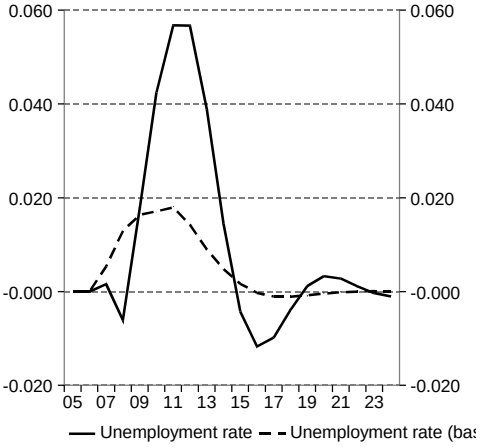
Source: NIER.

1 Labour market (LS,LH)
Responses in percent



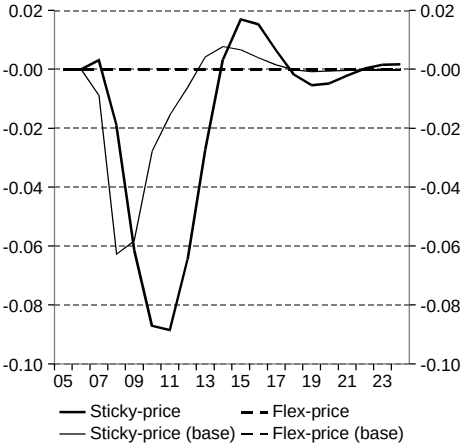
Source: NIER.

2 Unemployment (U_LS)
Responses in percentage points



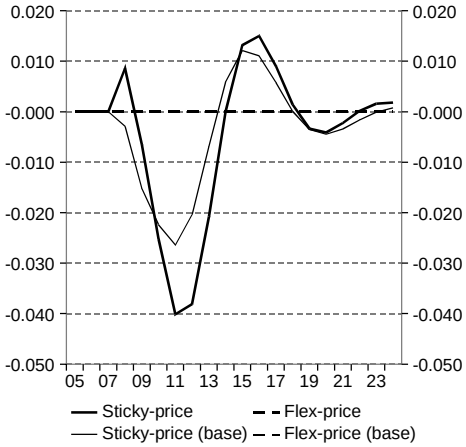
Source: NIER.

3 Hours worked, private (LHP)
Responses in percent



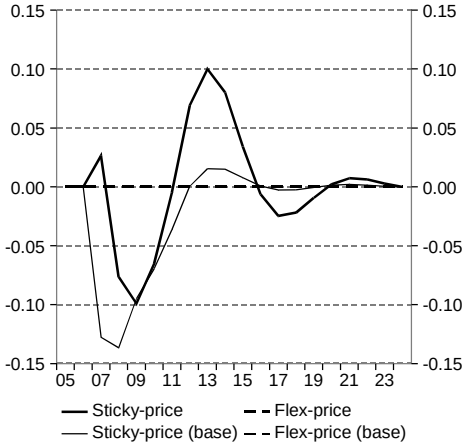
Source: NIER.

4 Capital stock (KP)
Responses in percent



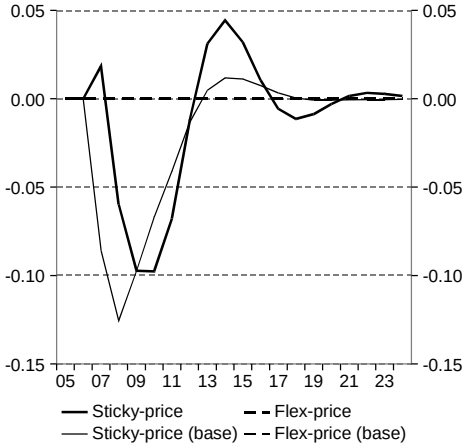
Source: NIER.

5 Productivity, TFP (AH)
Responses in percent



Source: NIER.

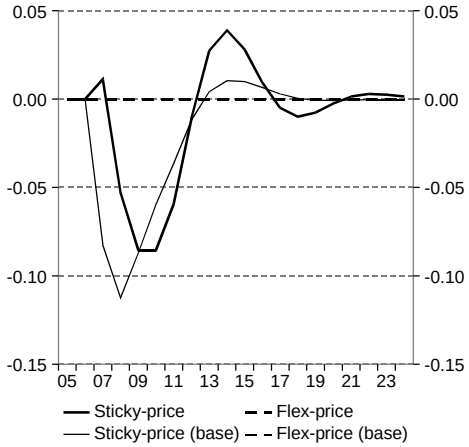
6 Production, private (YPG)
Responses in percent



Source: NIER.

7 GDP, real (Y)

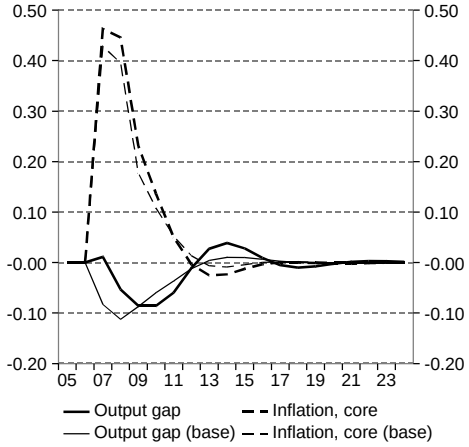
Responses in percent



Source: NIER.

8 Output gap & core inflation

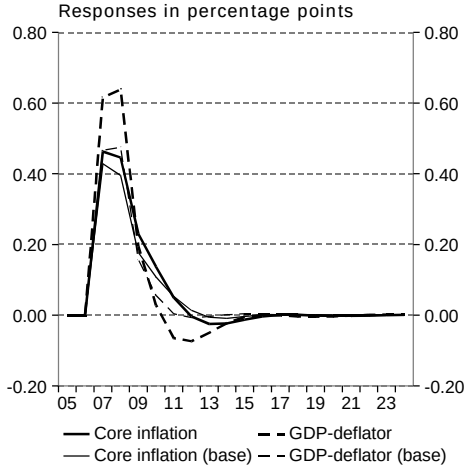
Responses in percentage points



Source: NIER.

9 Inflation (CORE,P)

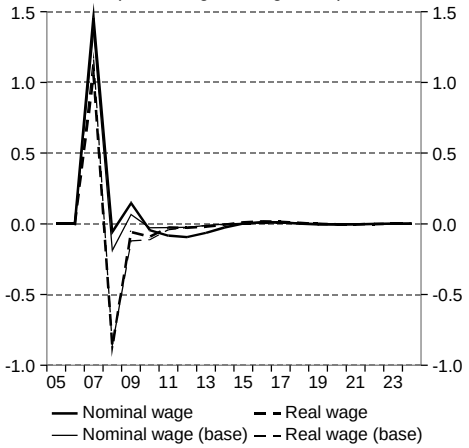
Responses in percentage points



Source: NIER.

10 Nominal & real wage (NW,WP)

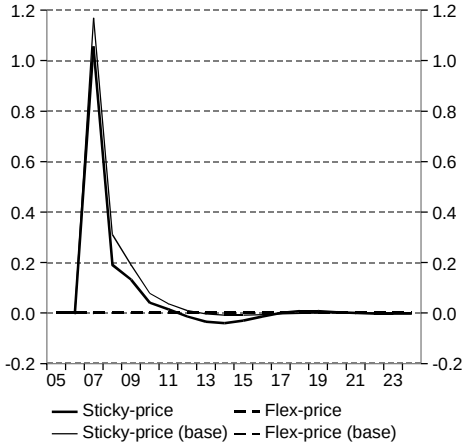
Annual percentage change, responses



Source: NIER.

11 Real wage rate (WP)

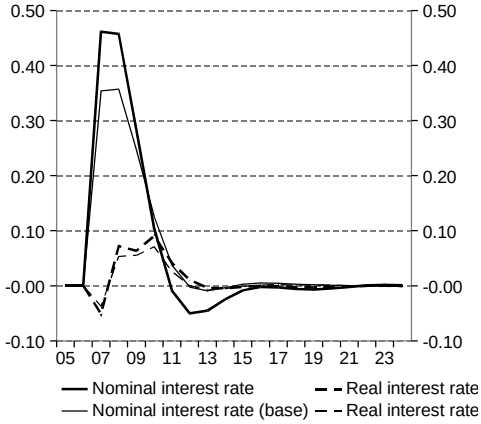
Responses in percent



Source: NIER.

12 Nominal & real interest rate (NR,R)

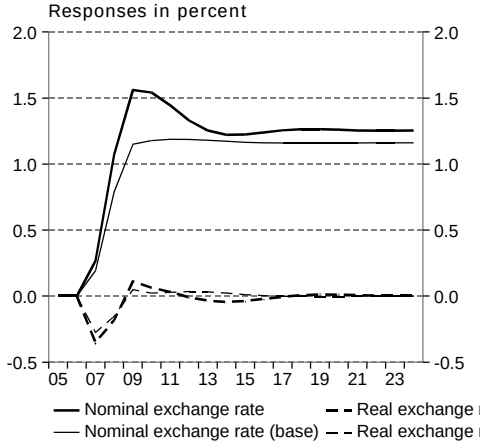
Responses in percentage points



Source: NIER.

13 Nominal & real exchange rate (NER,RER)

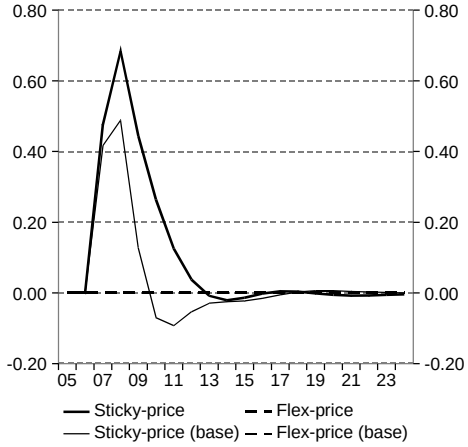
Responses in percent



Source: NIER.

14 Terms-of-trade (PX/PM)

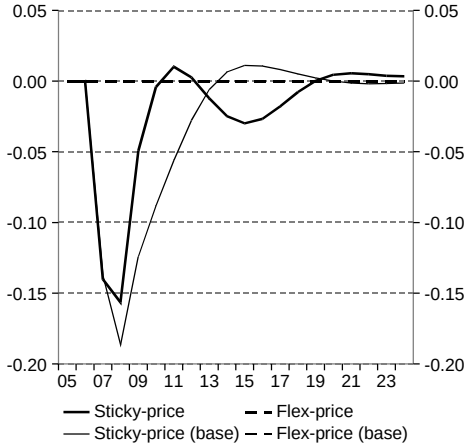
Responses in percent



Source: NIER.

15 Exports (X)

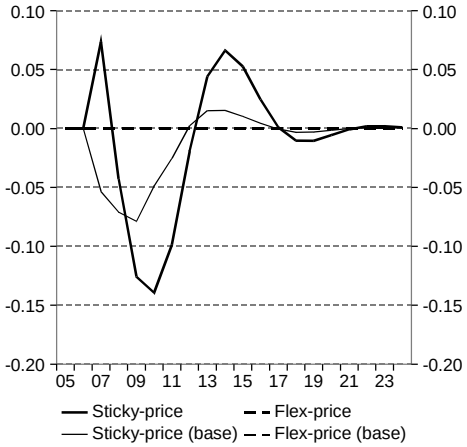
Responses in percent



Source: NIER.

16 Imports (M)

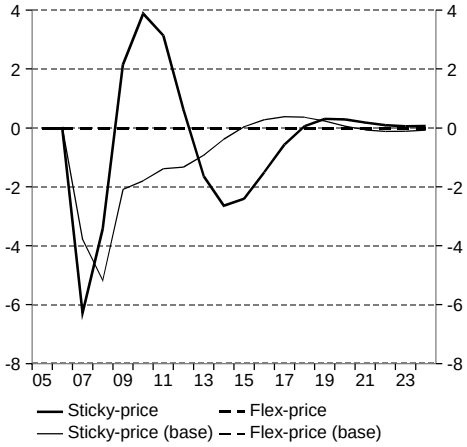
Responses in percent



Source: NIER.

17 Net exports (XNET)

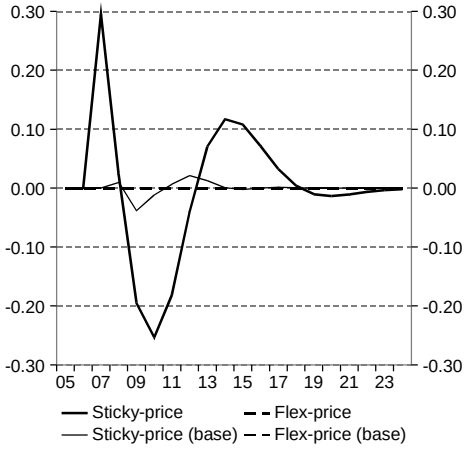
Responses in percent



Source: NIER.

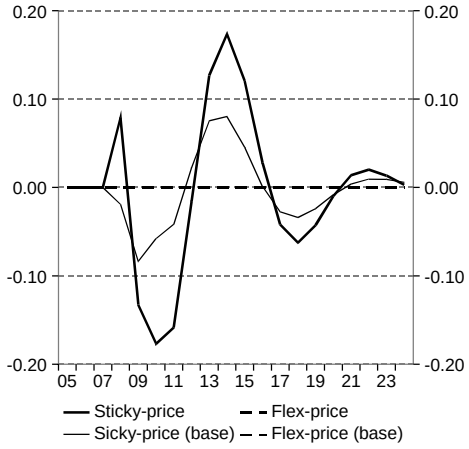
18 Private consumption (C)

Responses in percent



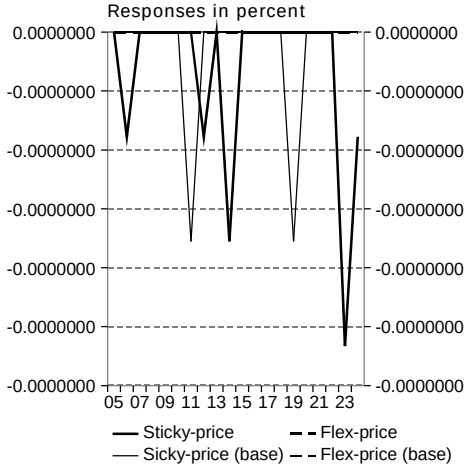
Source: NIER.

19 Investment (I)
Responses in percent



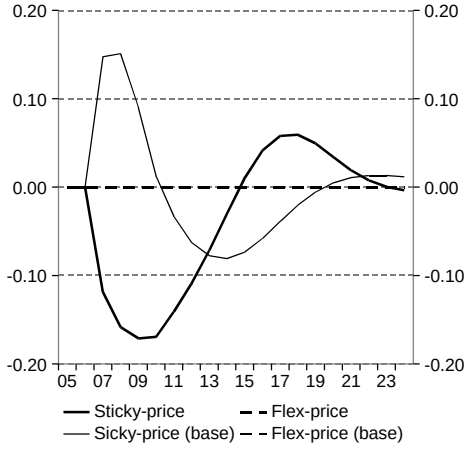
Source: NIER.

20 Government consumption
Responses in percent



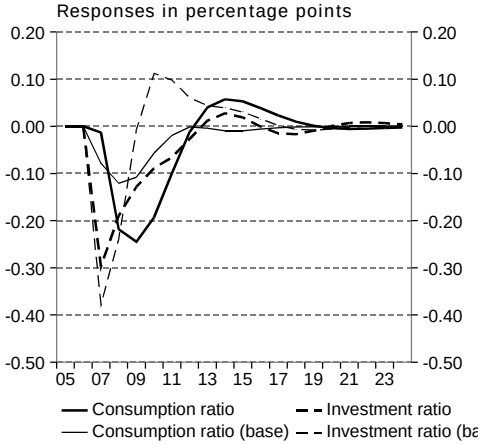
Source: NIER.

21 Gov. assets to GDP ratio (BG/Y
Responses in percentage points



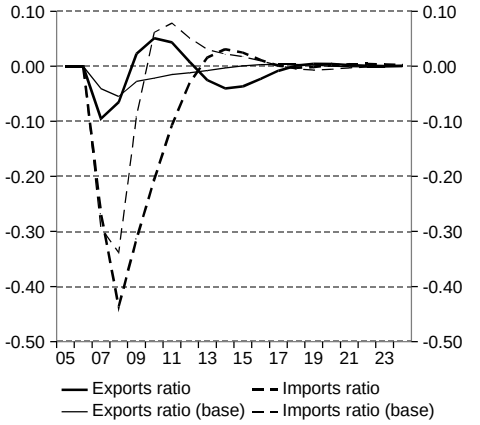
Source: NIER.

22 Consumption & investment, GDP ratios, current prices
Responses in percentage points



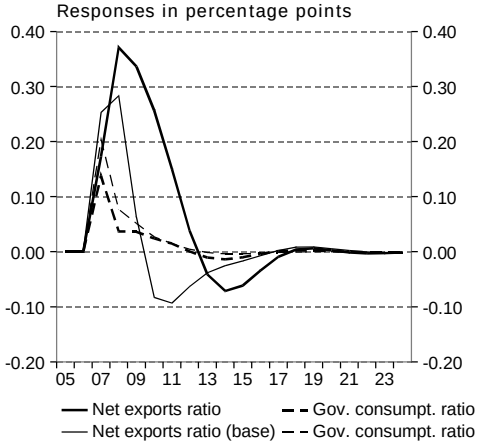
Source: NIER.

23 Exports & imports, GDP ratios, current prices
Responses in percentage points



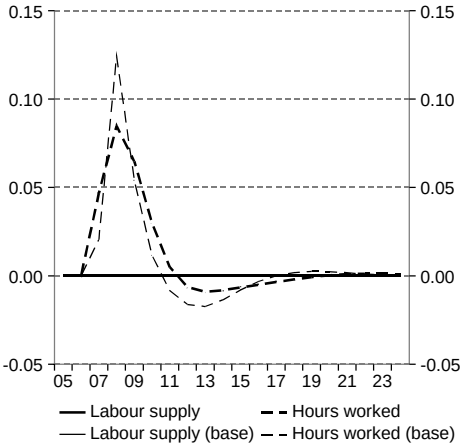
Source: NIER.

24 Net exports & gov. consumpt., GDP ratios, current prices
Responses in percentage points



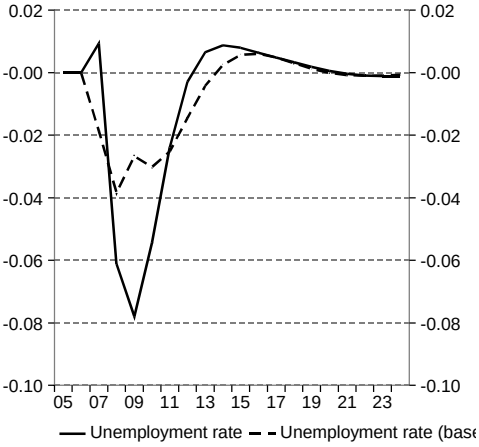
Source: NIER.

1 Labour market (LS,LH)
Responses in percent



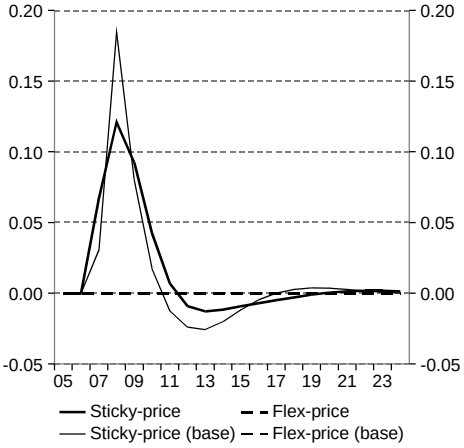
Source: NIER.

2 Unemployment (U_LS)
Responses in percentage points



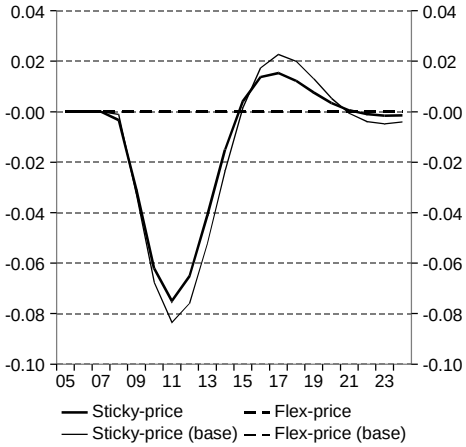
Source: NIER.

3 Hours worked, private (LHP)
Responses in percent



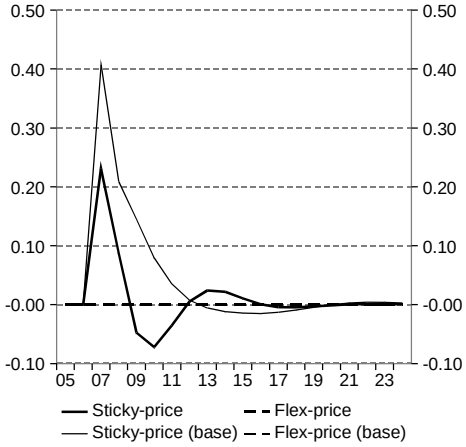
Source: NIER.

4 Capital stock (KP)
Responses in percent



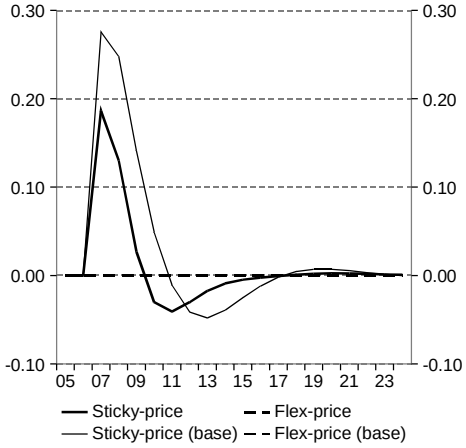
Source: NIER.

5 Productivity, TFP (AH)
Responses in percent



Source: NIER.

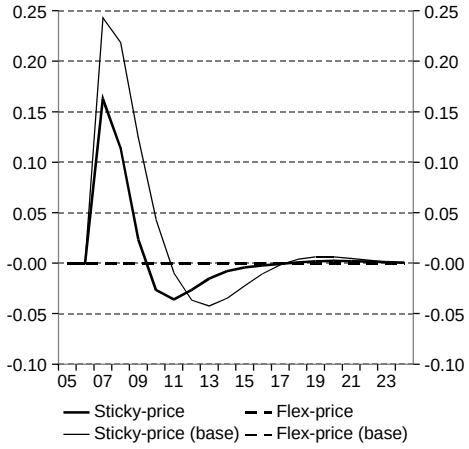
6 Production, private (YPG)
Responses in percent



Source: NIER.

7 GDP, real (Y)

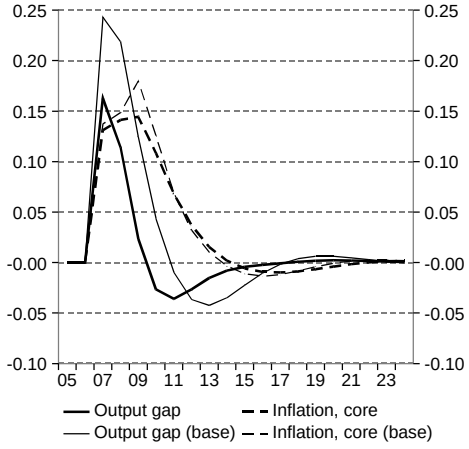
Responses in percent



Source: NIER.

8 Output gap & core inflation

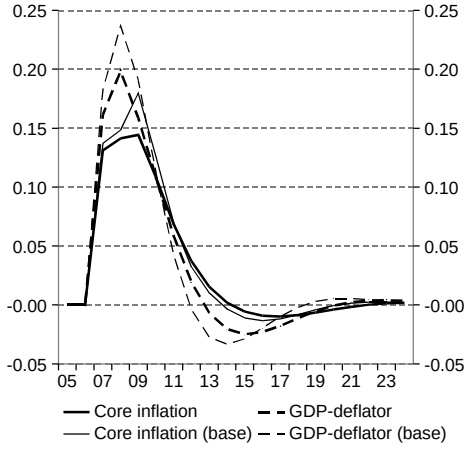
Responses in percentage points



Source: NIER.

9 Inflation (CORE,P)

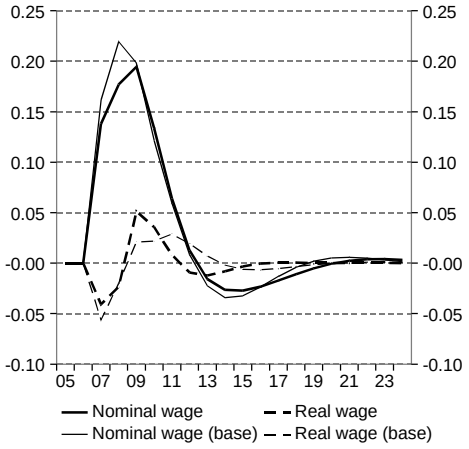
Responses in percentage points



Source: NIER.

10 Nominal & real wage (NW,WP)

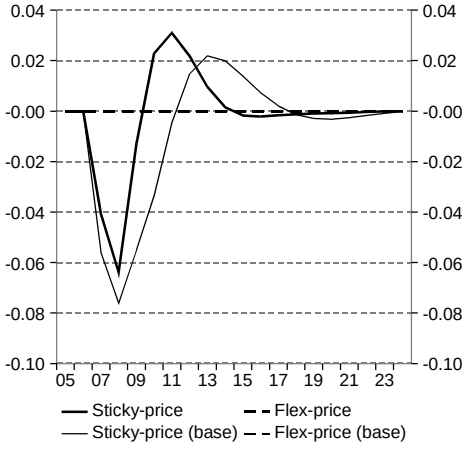
Annual percentage change, responses



Source: NIER.

11 Real wage rate (WP)

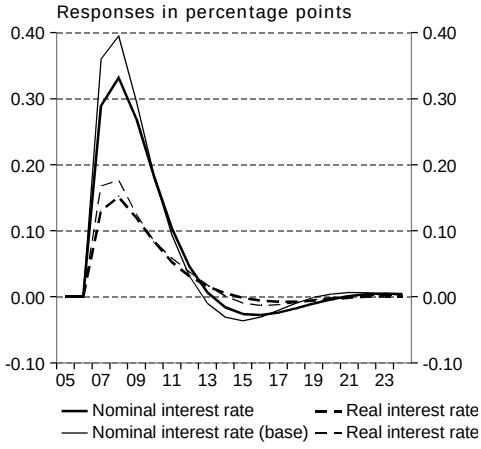
Responses in percent



Source: NIER.

12 Nominal & real interest rate (NR,R)

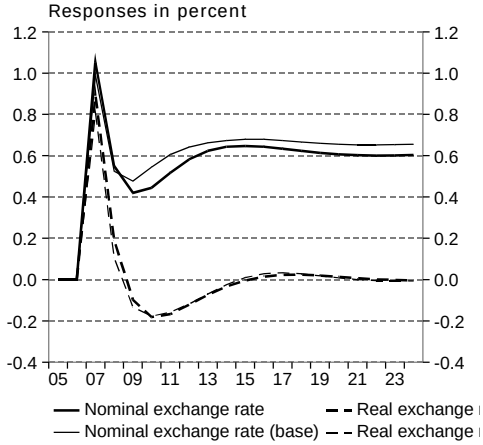
Responses in percentage points



Source: NIER.

13 Nominal & real exchange rate (NER,RER)

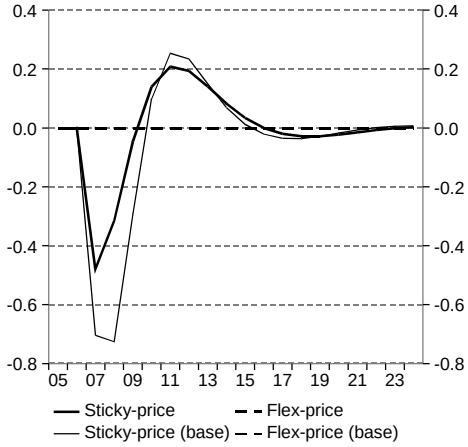
Responses in percent



Source: NIER.

14 Terms-of-trade (PX/PM)

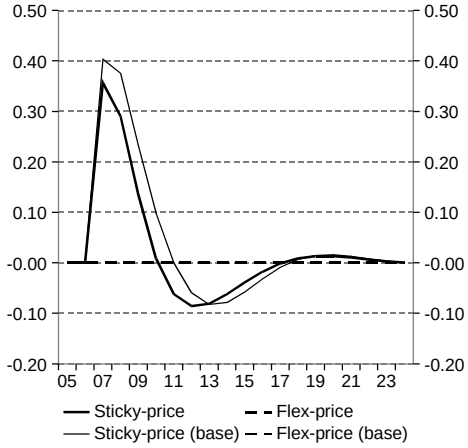
Responses in percent



Source: NIER.

15 Exports (X)

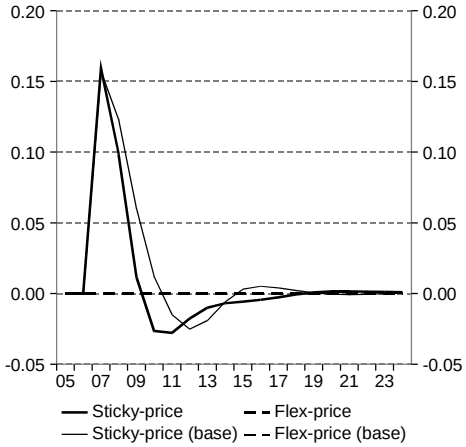
Responses in percent



Source: NIER.

16 Imports (M)

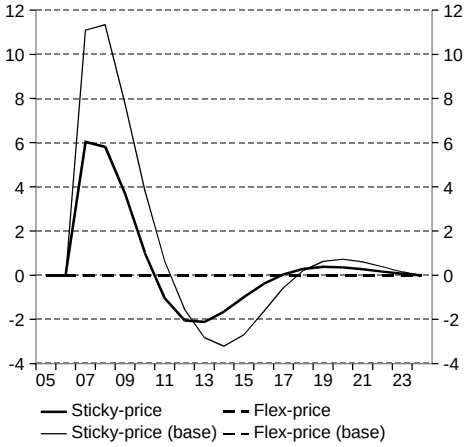
Responses in percent



Source: NIER.

17 Net exports (XNET)

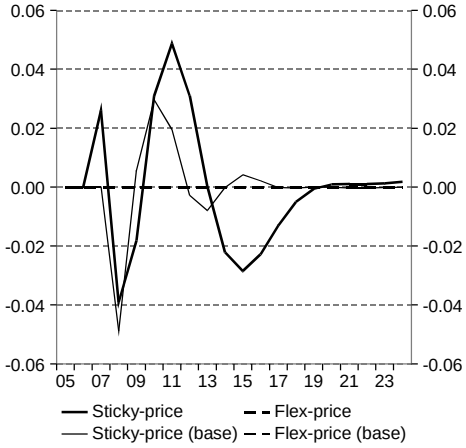
Responses in percent



Source: NIER.

18 Private consumption (C)

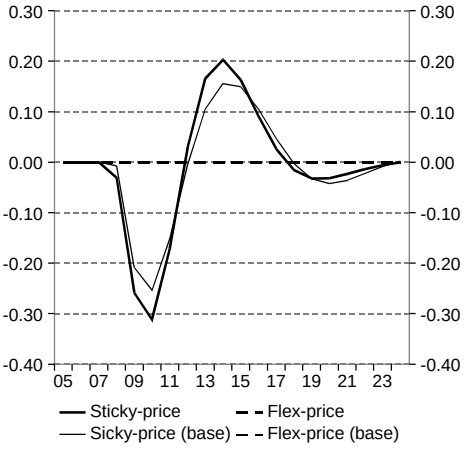
Responses in percent



Source: NIER.

19 Investment (I)

Responses in percent

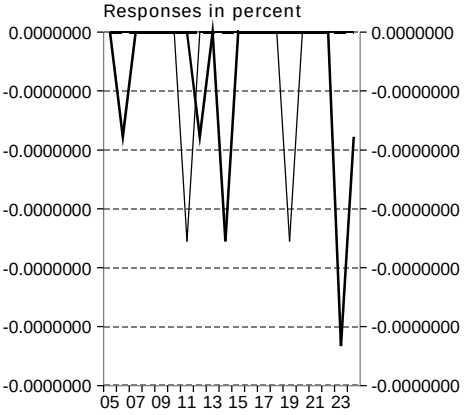


Sticky-price — Flex-price
Sicky-price (base) — Flex-price (base)

Source: NIER.

20 Government consumption

Responses in percent

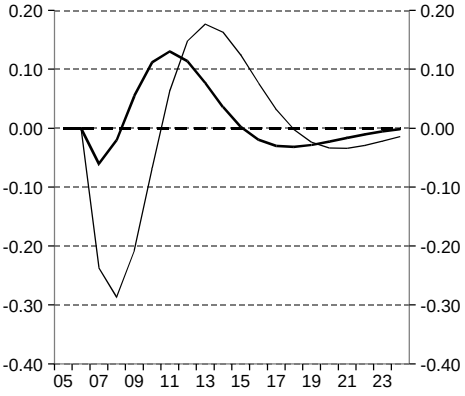


Sticky-price — Flex-price
Sicky-price (base) — Flex-price (base)

Source: NIER.

21 Gov. assets to GDP ratio (BG/Y

Responses in percentage points

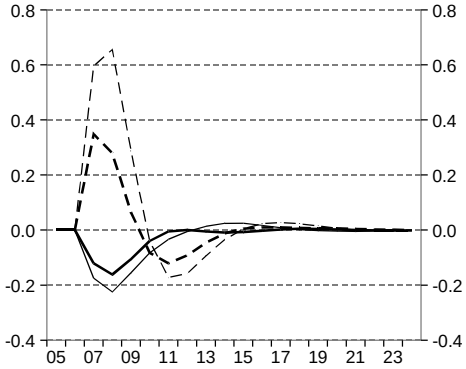


Sticky-price — Flex-price
Sicky-price (base) — Flex-price (base)

Source: NIER.

22 Consumption & investment, GDP ratios, current prices

Responses in percentage points

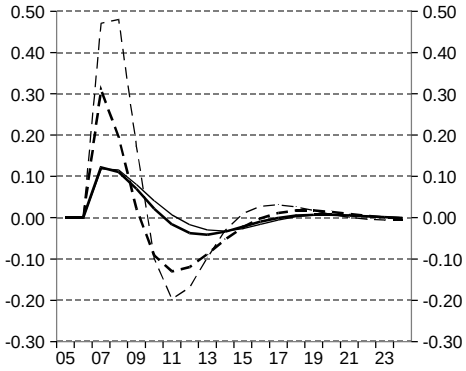


Consumption ratio — Investment ratio
Consumption ratio (base) — Investment ratio (bas

Source: NIER.

23 Exports & imports, GDP ratios, current prices

Responses in percentage points

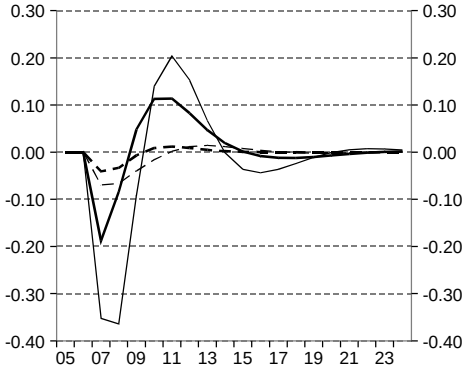


Exports ratio — Imports ratio
Exports ratio (base) — Imports ratio (base)

Source: NIER.

24 Net exports & gov. consumpt., GDP ratios, current prices

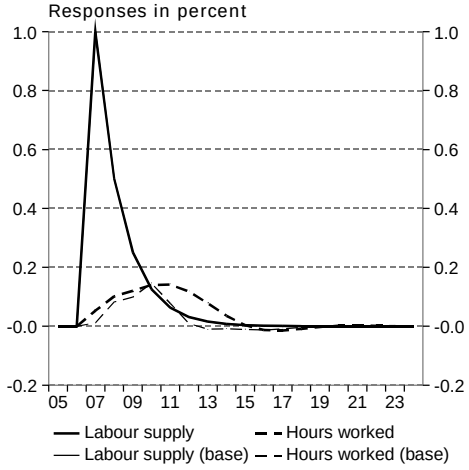
Responses in percentage points



Net exports ratio — Gov. consumpt. ratio
Net exports ratio (base) — Gov. consumpt. ratio

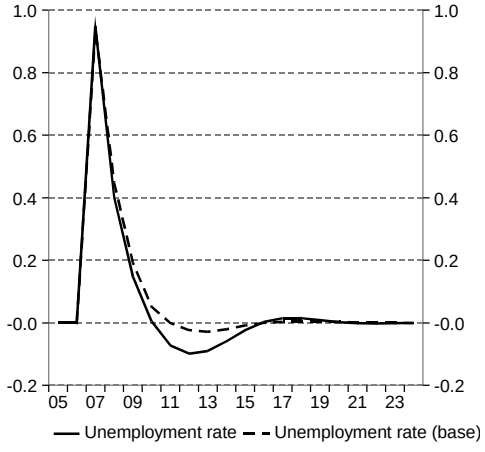
Source: NIER.

1 Labour market (LS,LH)
Responses in percent



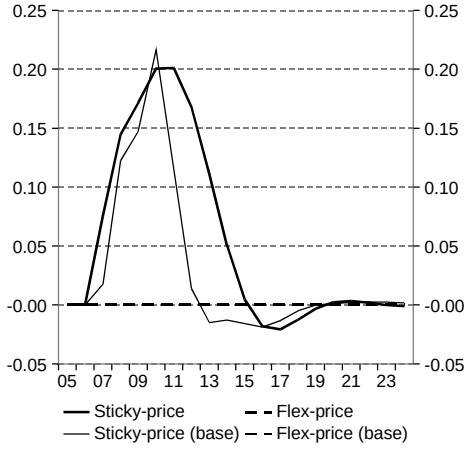
Source: NIER.

2 Unemployment (U_LS)
Responses in percentage points



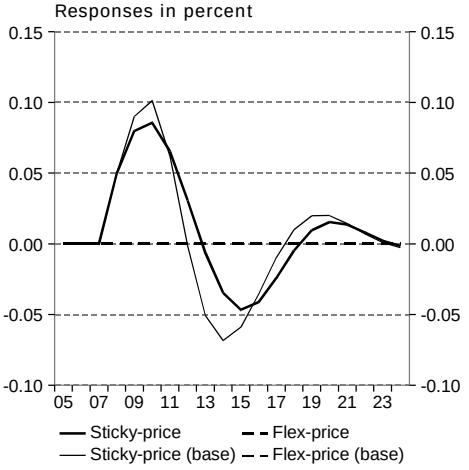
Source: NIER.

3 Hours worked, private (LHP)
Responses in percent



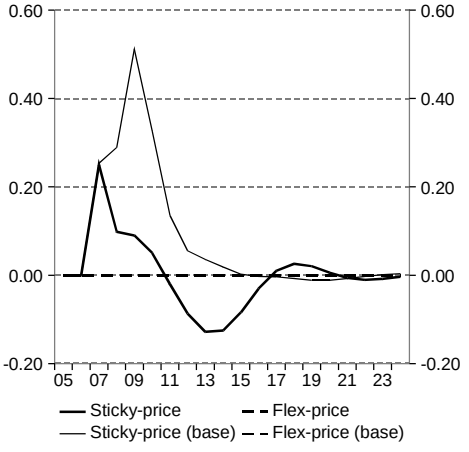
Source: NIER.

4 Capital stock (KP)
Responses in percent



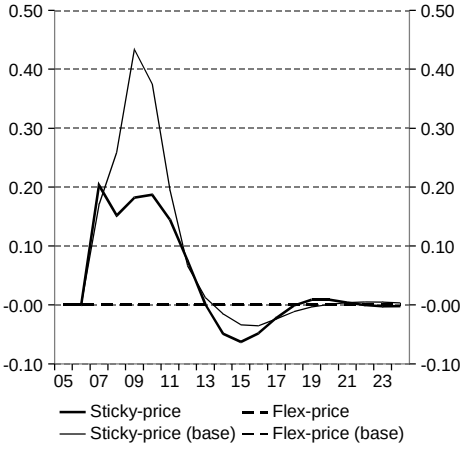
Source: NIER.

5 Productivity, TFP (AH)
Responses in percent



Source: NIER.

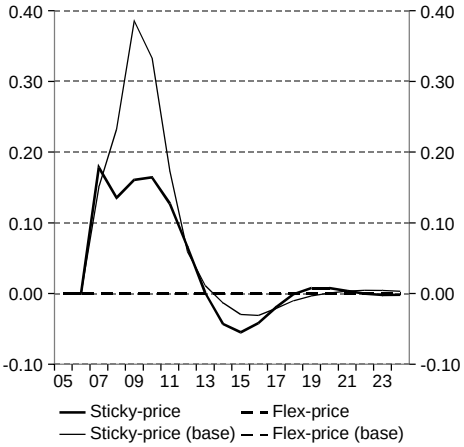
6 Production, private (YPG)
Responses in percent



Source: NIER.

7 GDP, real (Y)

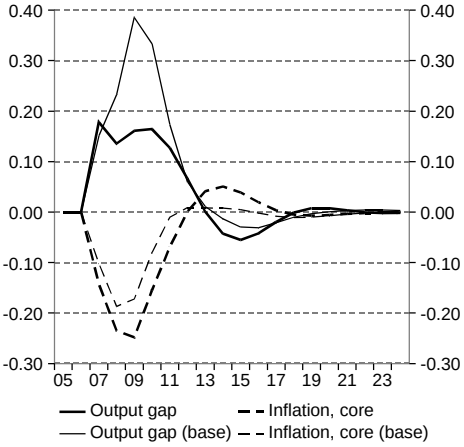
Responses in percent



Source: NIER.

8 Output gap & core inflation

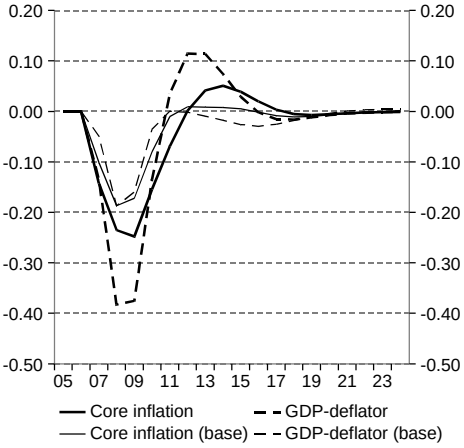
Responses in percentage points



Source: NIER.

9 Inflation (CORE,P)

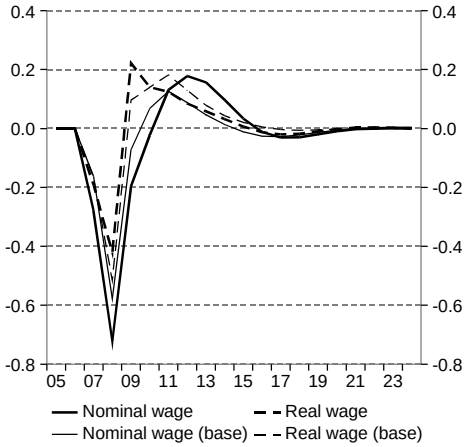
Responses in percentage points



Source: NIER.

10 Nominal & real wage (NW,WP)

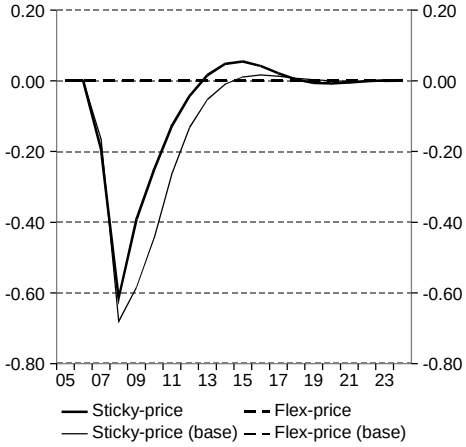
Annual percentage change, responses



Source: NIER.

11 Real wage rate (WP)

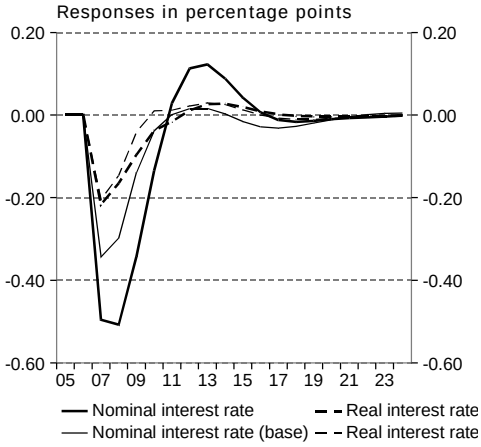
Responses in percent



Source: NIER.

12 Nominal & real interest rate (NR,R)

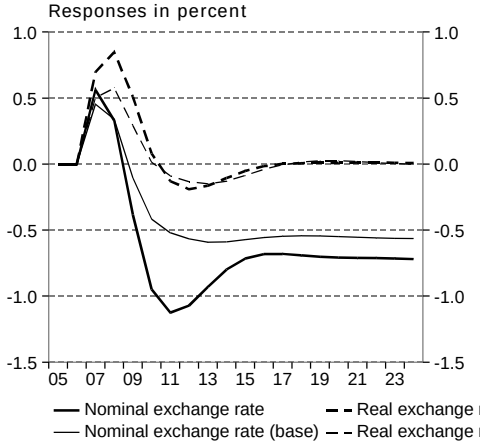
Responses in percentage points



Source: NIER.

13 Nominal & real exchange rate (NER,RER)

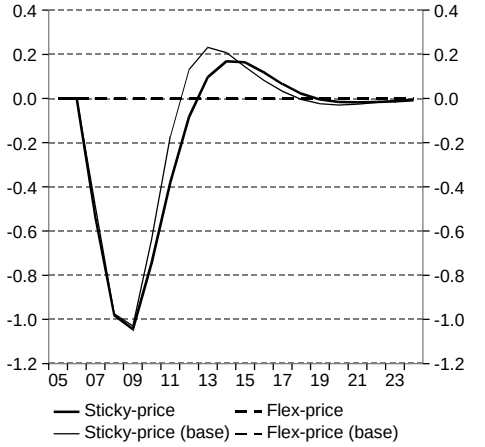
Responses in percent



Source: NIER.

14 Terms-of-trade (PX/PM)

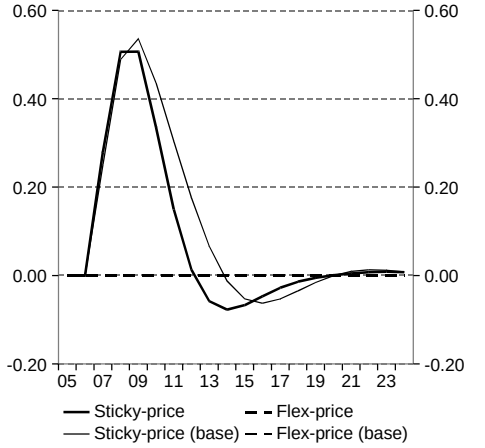
Responses in percent



Source: NIER.

15 Exports (X)

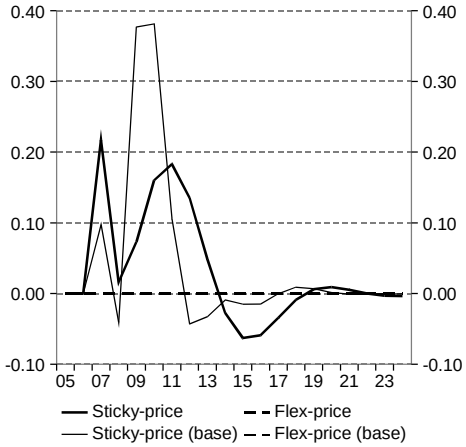
Responses in percent



Source: NIER.

16 Imports (M)

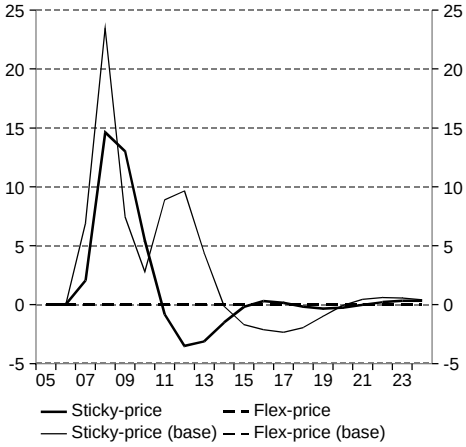
Responses in percent



Source: NIER.

17 Net exports (XNET)

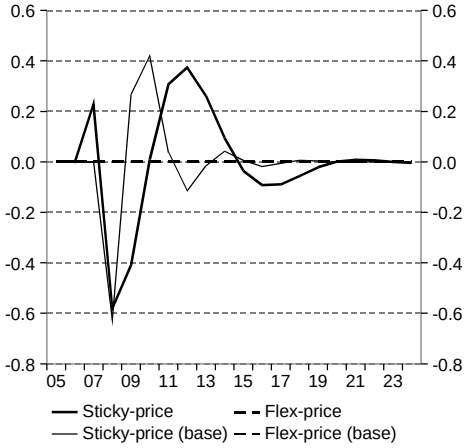
Responses in percent



Source: NIER.

18 Private consumption (C)

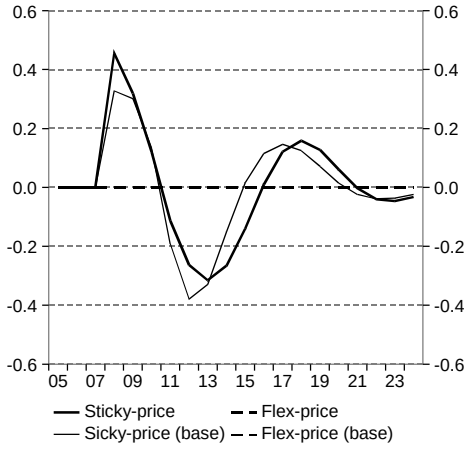
Responses in percent



Source: NIER.

19 Investment (I)

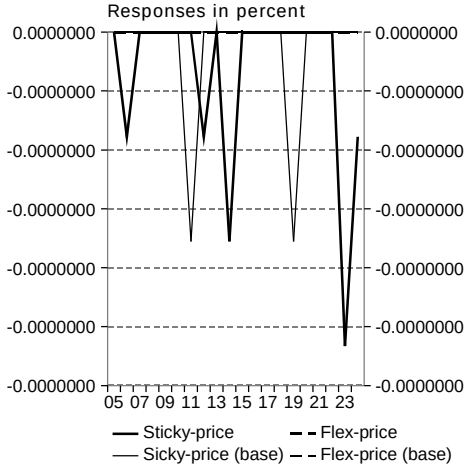
Responses in percent



Source: NIER.

20 Government consumption

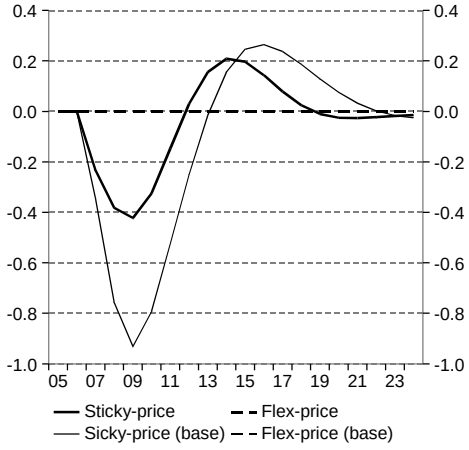
Responses in percent



Source: NIER.

21 Gov. assets to GDP ratio (BG/Y)

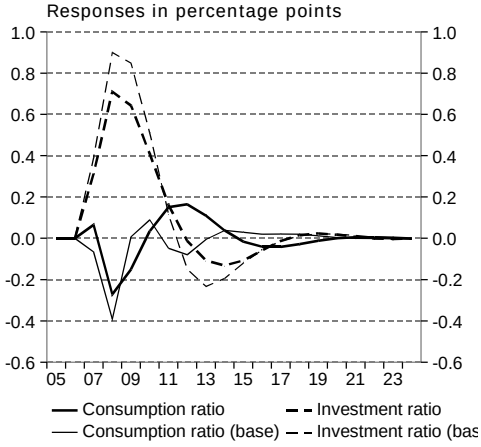
Responses in percentage points



Source: NIER.

22 Consumption & investment, GDP ratios, current prices

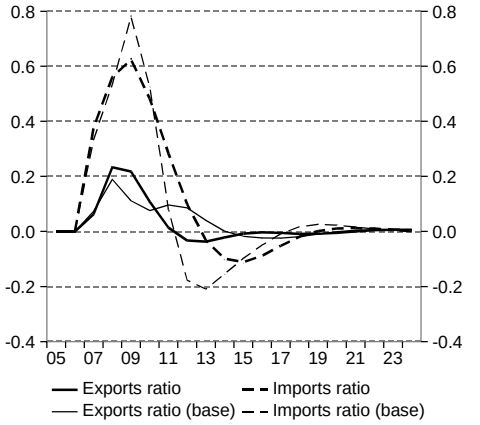
Responses in percentage points



Source: NIER.

23 Exports & imports, GDP ratios, current prices

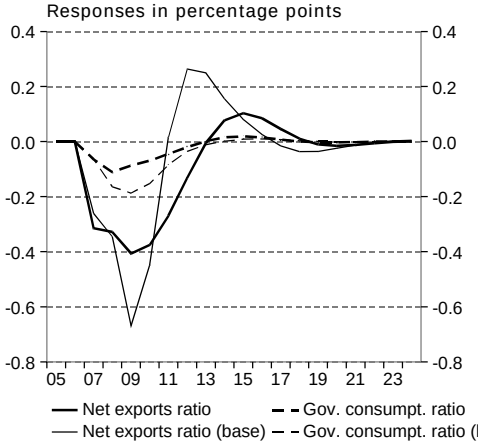
Responses in percentage points



Source: NIER.

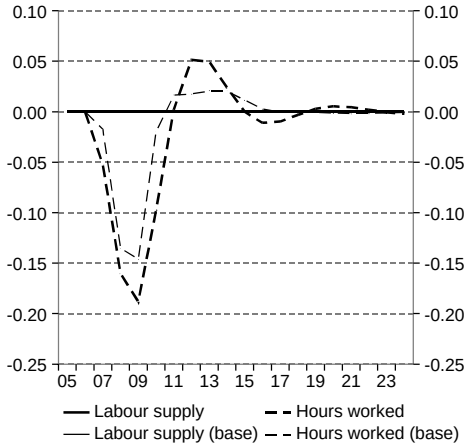
24 Net exports & gov. consumpt., GDP ratios, current prices

Responses in percentage points



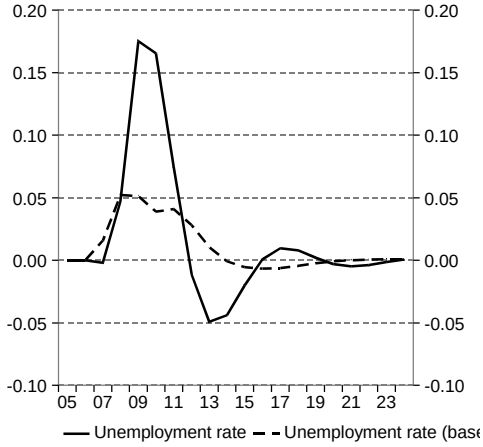
Source: NIER.

1 Labour market (LS,LH)
Responses in percent



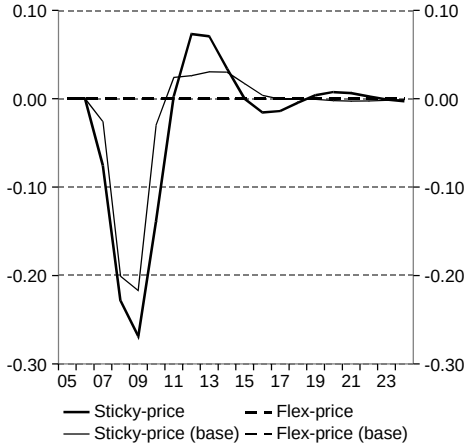
Source: NIER.

2 Unemployment (U_LS)
Responses in percentage points



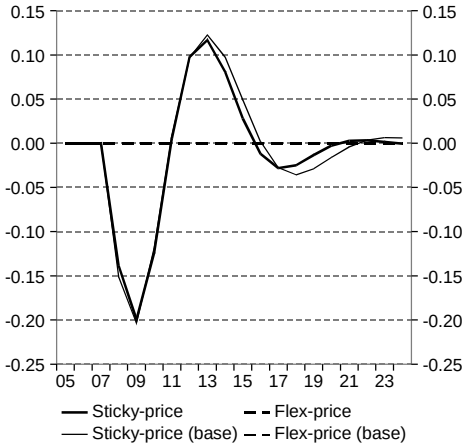
Source: NIER.

3 Hours worked, private (LHP)
Responses in percent



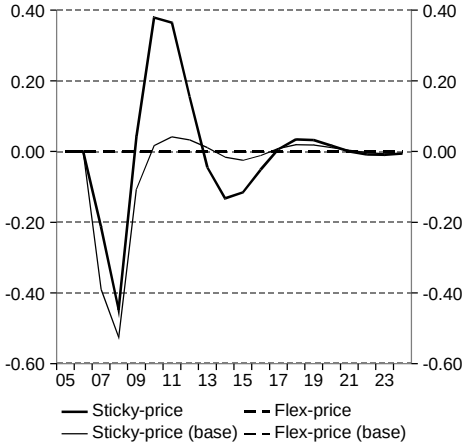
Source: NIER.

4 Capital stock (KP)
Responses in percent



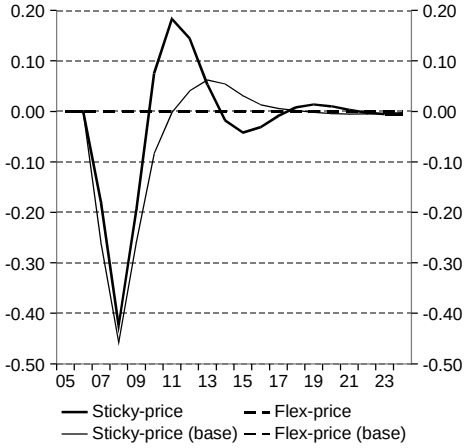
Source: NIER.

5 Productivity, TFP (AH)
Responses in percent



Source: NIER.

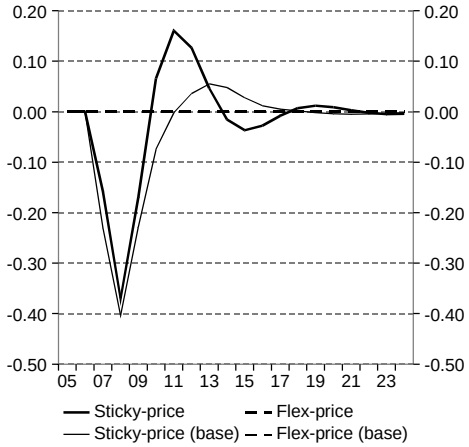
6 Production, private (YPG)
Responses in percent



Source: NIER.

7 GDP, real (Y)

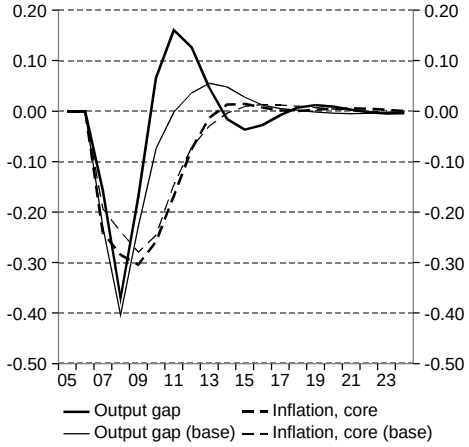
Responses in percent



Source: NIER.

8 Output gap & core inflation

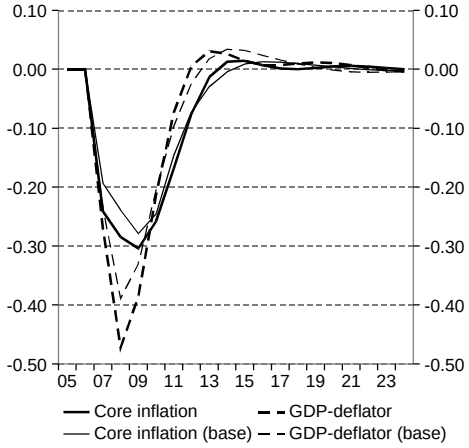
Responses in percentage points



Source: NIER.

9 Inflation (CORE,P)

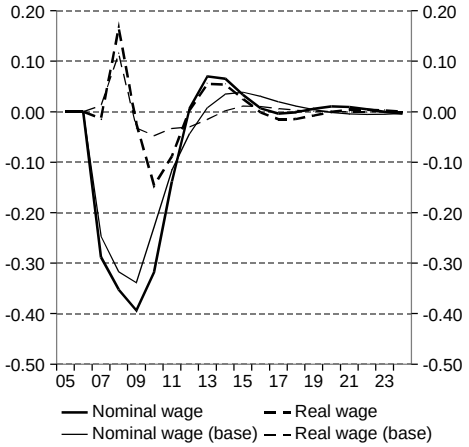
Responses in percentage points



Source: NIER.

10 Nominal & real wage (NW,WP)

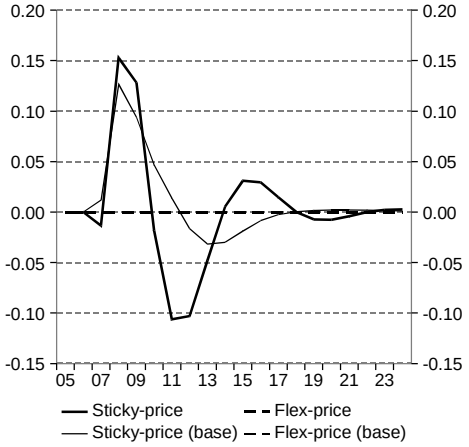
Annual percentage change, responses



Source: NIER.

11 Real wage rate (WP)

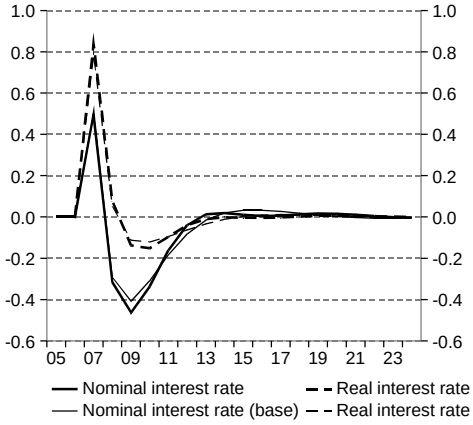
Responses in percent



Source: NIER.

12 Nominal & real interest rate (NR,R)

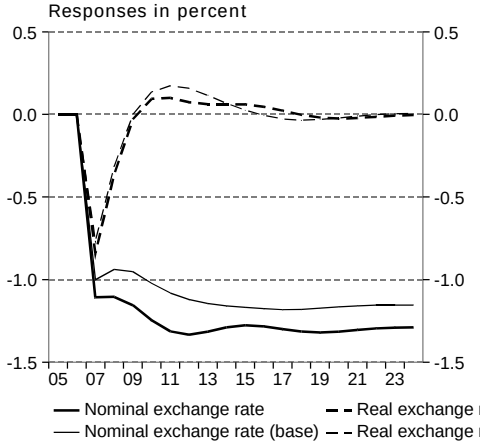
Responses in percentage points



Source: NIER.

13 Nominal & real exchange rate (NER,RER)

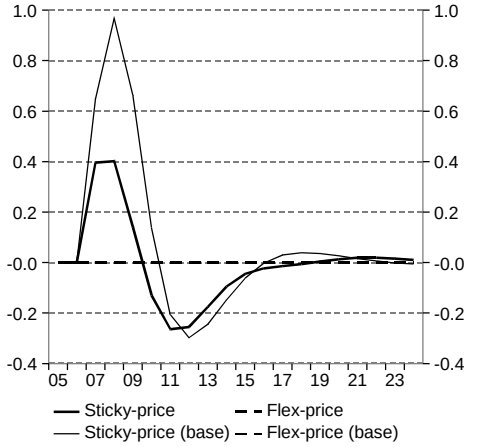
Responses in percent



Source: NIER.

14 Terms-of-trade (PX/PM)

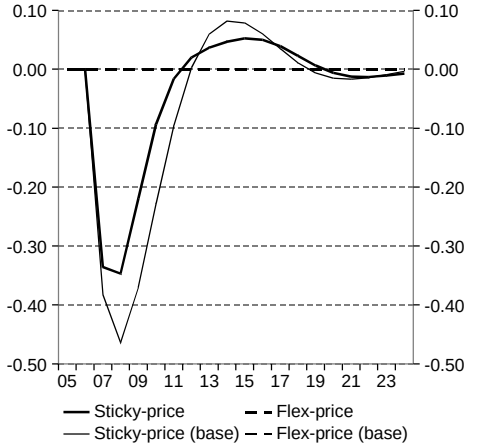
Responses in percent



Source: NIER.

15 Exports (X)

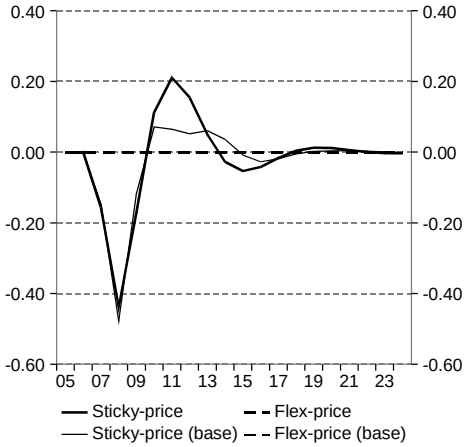
Responses in percent



Source: NIER.

16 Imports (M)

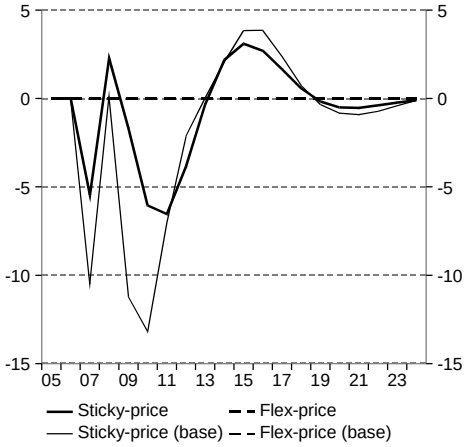
Responses in percent



Source: NIER.

17 Net exports (XNET)

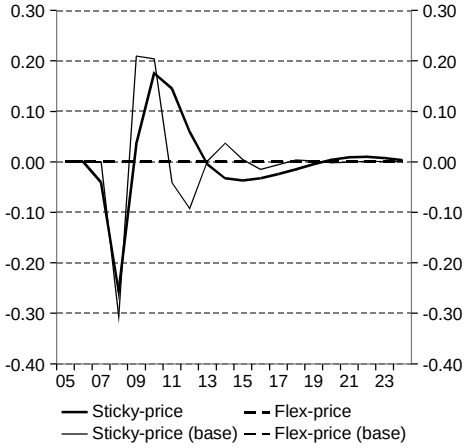
Responses in percent



Source: NIER.

18 Private consumption (C)

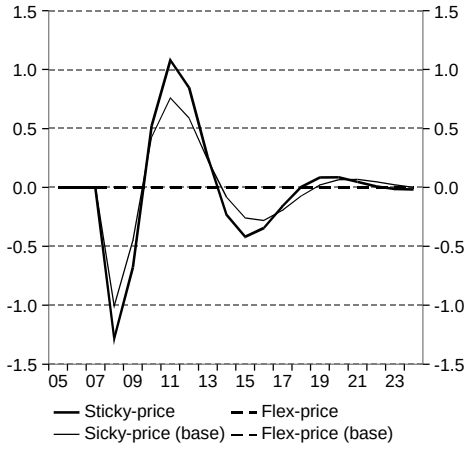
Responses in percent



Source: NIER.

19 Investment (I)

Responses in percent

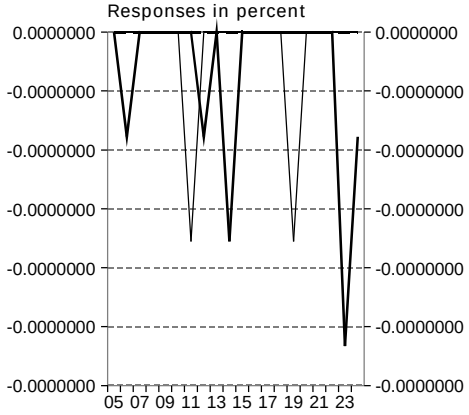


Sticky-price Flex-price
Sicky-price (base) Flex-price (base)

Source: NIER.

20 Government consumption

Responses in percent

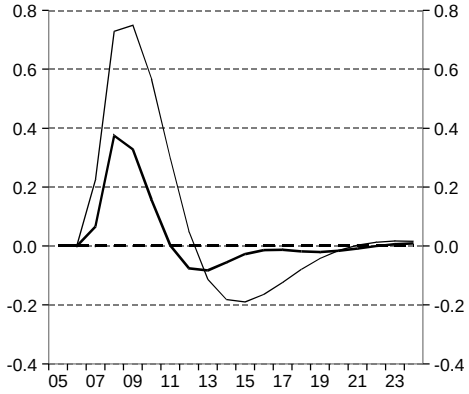


Sticky-price Flex-price
Sicky-price (base) Flex-price (base)

Source: NIER.

21 Gov. assets to GDP ratio (BG/Y)

Responses in percentage points

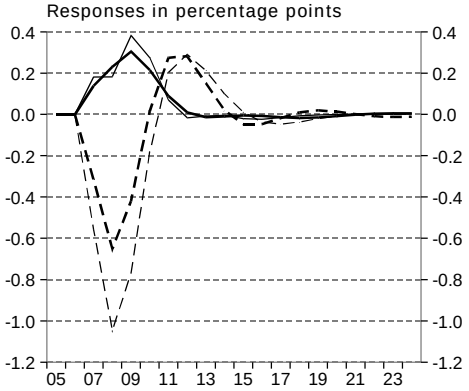


Sticky-price Flex-price
Sicky-price (base) Flex-price (base)

Source: NIER.

22 Consumption & investment, GDP ratios, current prices

Responses in percentage points

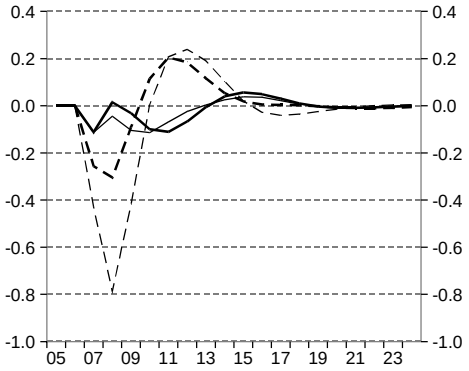


Consumption ratio Investment ratio
Consumption ratio (base) Investment ratio (bas

Source: NIER.

23 Exports & imports, GDP ratios, current prices

Responses in percentage points

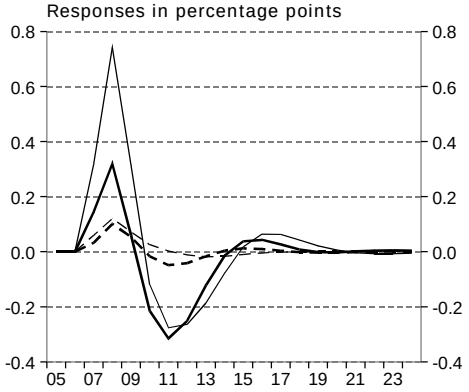


Exports ratio Imports ratio
Exports ratio (base) Imports ratio (base)

Source: NIER.

24 Net exports & gov. consumpt., GDP ratios, current prices

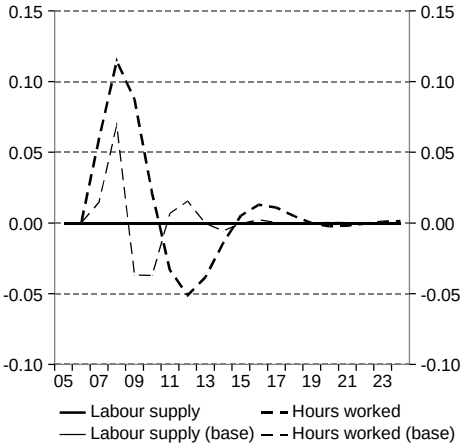
Responses in percentage points



Net exports ratio Gov. consumpt. ratio
Net exports ratio (base) Gov. consumpt. ratio (

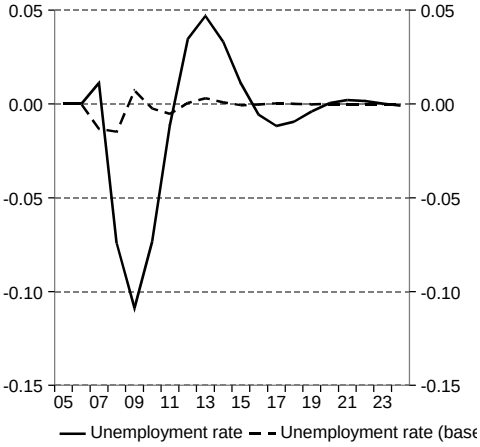
Source: NIER.

1 Labour market (LS,LH)
Responses in percent



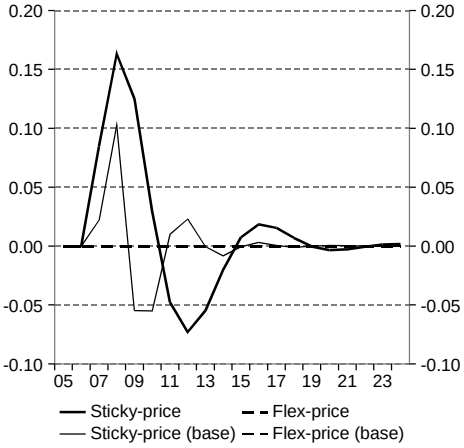
Source: NIER.

2 Unemployment (U_LS)
Responses in percentage points



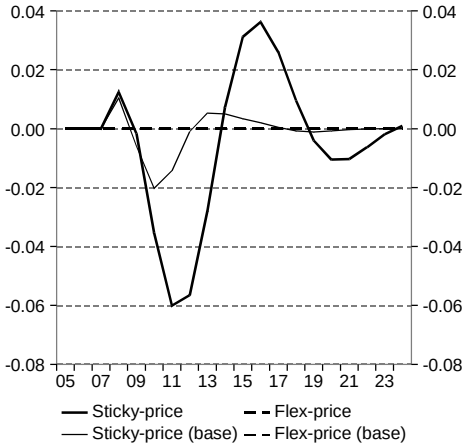
Source: NIER.

3 Hours worked, private (LHP)
Responses in percent



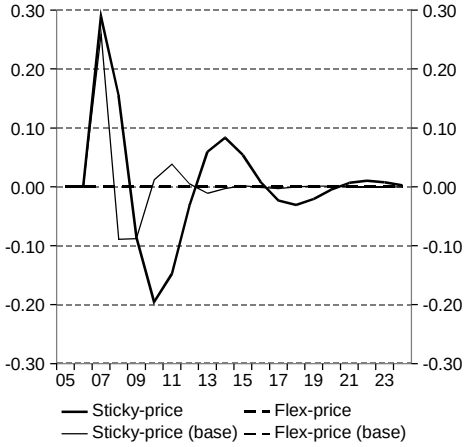
Source: NIER.

4 Capital stock (KP)
Responses in percent



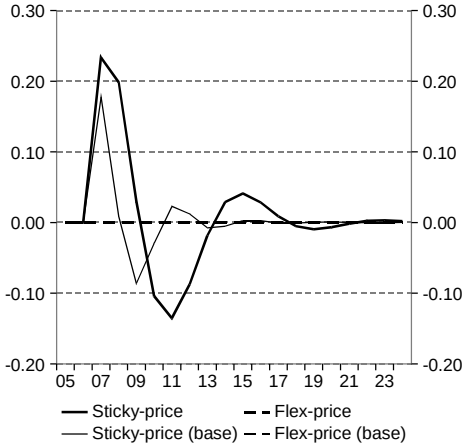
Source: NIER.

5 Productivity, TFP (AH)
Responses in percent



Source: NIER.

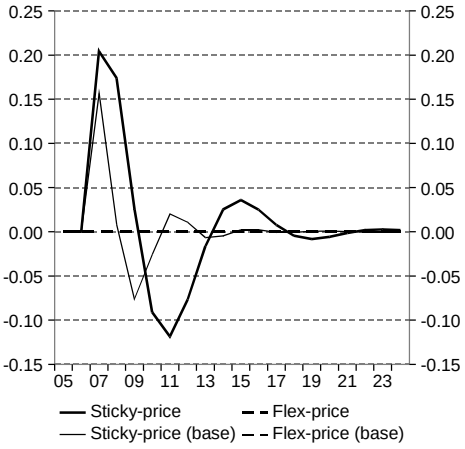
6 Production, private (YPG)
Responses in percent



Source: NIER.

7 GDP, real (Y)

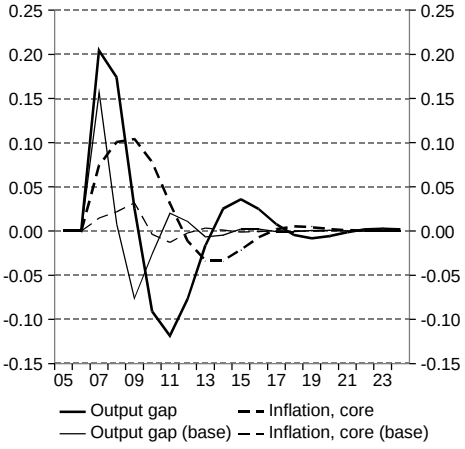
Responses in percent



Source: NIER.

8 Output gap & core inflation

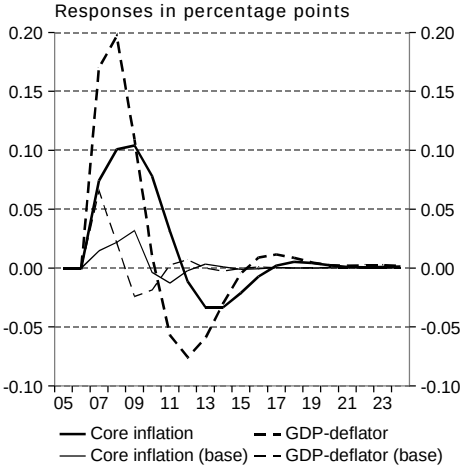
Responses in percentage points



Source: NIER.

9 Inflation (CORE,P)

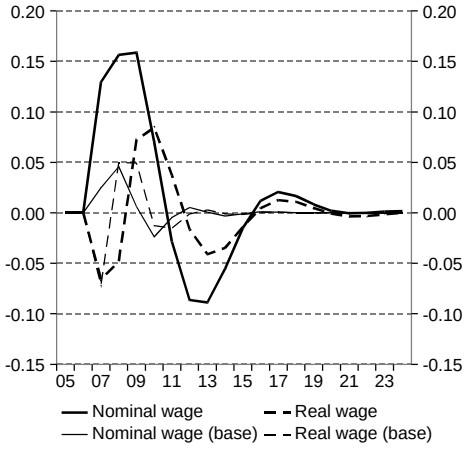
Responses in percentage points



Source: NIER.

10 Nominal & real wage (NW,WP)

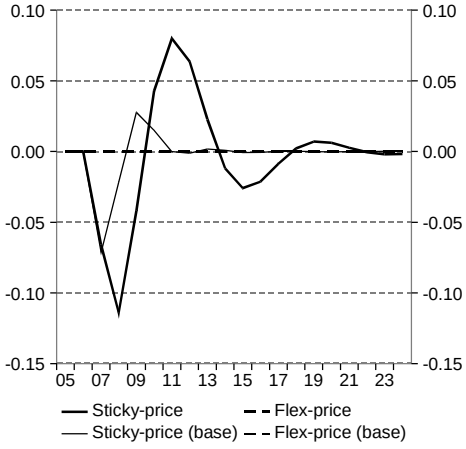
Annual percentage change, responses



Source: NIER.

11 Real wage rate (WP)

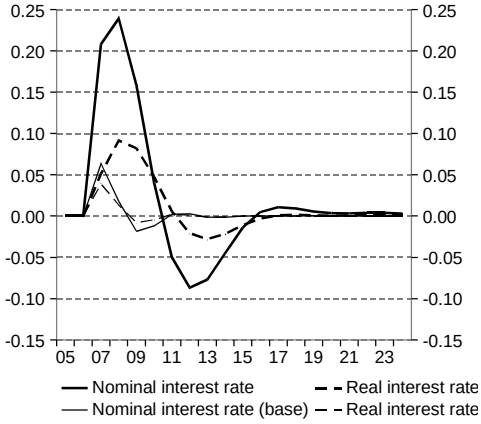
Responses in percent



Source: NIER.

12 Nominal & real interest rate (NR,R)

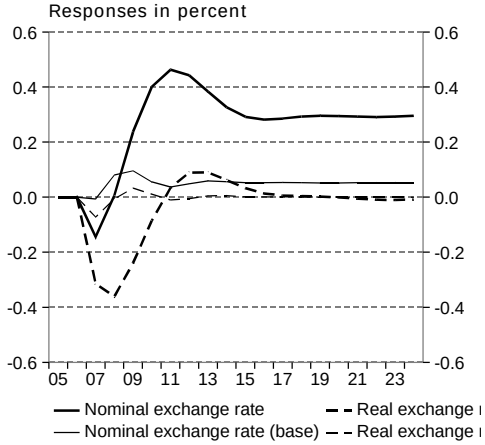
Responses in percentage points



Source: NIER.

13 Nominal & real exchange rate (NER,RER)

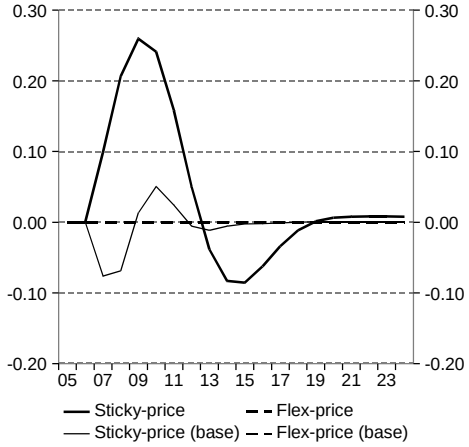
Responses in percent



Source: NIER.

14 Terms-of-trade (PX/PM)

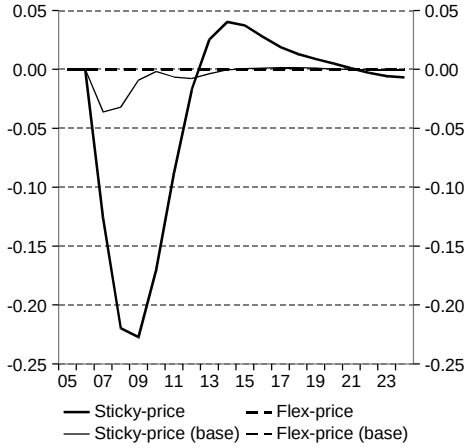
Responses in percent



Source: NIER.

15 Exports (X)

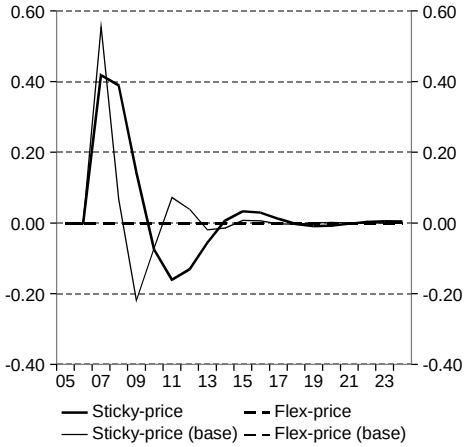
Responses in percent



Source: NIER.

16 Imports (M)

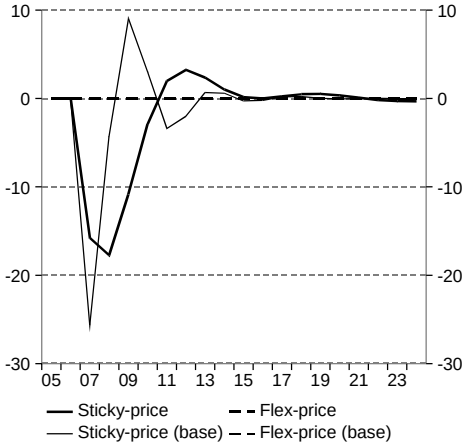
Responses in percent



Source: NIER.

17 Net exports (XNET)

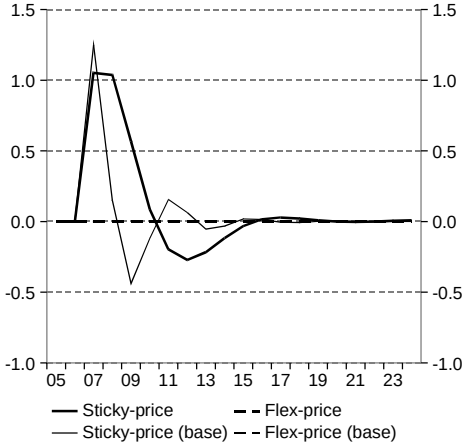
Responses in percent



Source: NIER.

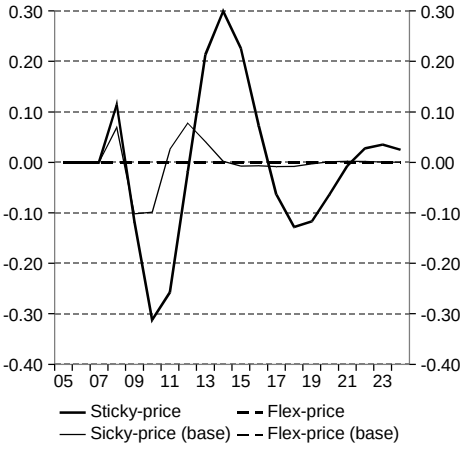
18 Private consumption (C)

Responses in percent



Source: NIER.

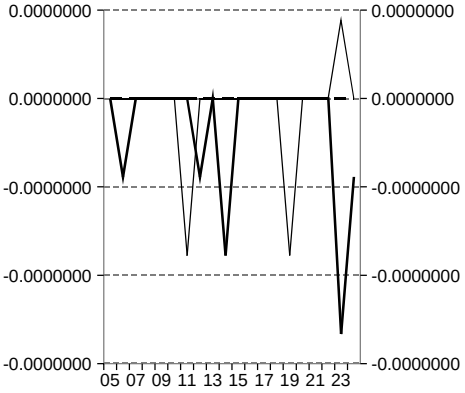
19 Investment (I)
Responses in percent



Sticky-price Flex-price
Sicky-price (base) Flex-price (base)

Source: NIER.

20 Government consumption (
Responses in percent



Sticky-price Flex-price
Sicky-price (base) Flex-price (base)

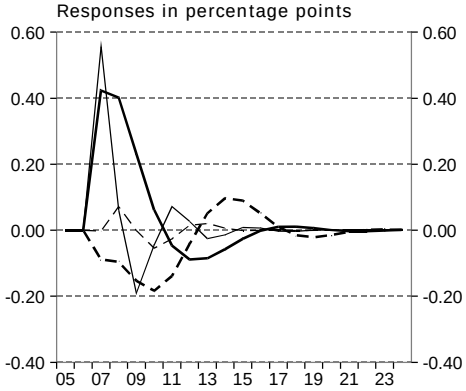
Source: NIER.

21 Gov. assets to GDP ratio (BG/Y
Responses in percentage points

Sticky-price Flex-price
Sicky-price (base) Flex-price (base)

Source: NIER.

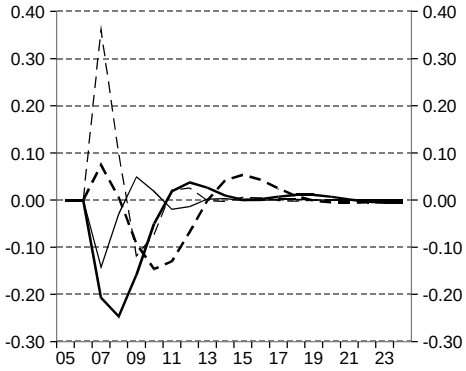
22 Consumption & investment, GDP ratios, current prices
Responses in percentage points



Consumption ratio Investment ratio
Consumption ratio (base) Investment ratio (ba

Source: NIER.

23 Exports & imports, GDP ratios, current prices
Responses in percentage points



Exports ratio Imports ratio
Exports ratio (base) Imports ratio (base)

Source: NIER.

24 Net exports & gov. consumpt., GDP ratios, current prices
Responses in percentage points

Net exports ratio Gov. consumpt. ratio
Net exports ratio (base) Gov. consumpt. ratio

Source: NIER.

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