

Financialisation, Debt and Inequality – scenarios based on a stock flow consistent model

- Preliminary results

Presentation at the
19th Conference of the Research Network
Macroeconomics and Macroeconomic Policies:

The Spectre of Stagnation? Europe in the World Economy

22.10. – 24.10.2015, Berlin

Daniel Detzer

Berlin School of Economics and Law

Task of Deliverable D 11.05

Exerts of the DoW

- The central objective of this work package will be to explore the possible evolutions of financialisation, the financial sector and relevant policies over a 15 to 20 year time horizon.
- Two of the eight features characterizing financialisation are explored in task 5:
 - (v) ‘financialisation is strongly associated with market mechanisms, complemented or even reinforced by policies that have underpinned rising inequality of incomes and of inequality more generally’;
 - (vi) ‘consumption has often been sustained by the extension of credit’
- The **era of financialisation** has generally been associated **with rising inequality of income and wealth**. The interplay between inequality and financial crisis will **have been explored in WP3**. [...] **Using a stock-flow consistent approach**, possible **scenarios** are explored arising from the pattern of savings imbalances between sectors and between countries.

How we approach the task

- In WP 3 we have conducted a range of country studies.
 - almost all countries were exposed to the same trends of increasing inequality
 - But the macroeconomic performance was quite different
 - Export led mercantilist
 - Debt led private demand boom
- SFC model to show how ‚small differences‘ in institutional structures can lead to these differing results of the same trends
- Build our forecast exercise on these results

Content of the presentation

1. **Introduction**
2. *(Financialisation, inequality, debt and economic growth)*
3. *(Macroeconomic regimes and international imbalances)*
4. *(Literature review on SFC models dealing with financialisation and inequality)*
5. **Model Structure**
6. **Modeling strategy and the baseline scenarios**
7. **Experiments**
 1. *(Scenario 1: Increased propensity to consume)*
 2. **Scenario 2: Changes in the functional distribution of income**
 3. **Scenario 3: Changes in the wage dispersion**
 4. **Scenario 4: Increase wage dispersion with strong financial regulation**
 5. *(Scenario ...)*
8. **Some preliminary conclusions / foresights**

FESSUD annual conference 2015:
Impacts of Financialisation on Society, Environment, and Economy
Financialisation, Debt and Inequality –
Preliminary results for D11.05

MODEL STRUCTURE

Model Structure

- Stock Flow Consistent Model
- Euro area country
 - No exchange rate
 - No central bank
- Prices level is fixed
- Growth model
- 7 Sectors
- 2 assets + productive capital stock

Model Structure – Balance Sheet Matrix

	Worker 1	Worker 2	Rentiers	Firms	Banks	Government	Row	Sum
Deposits	+	+	+	+	-	+	+	0
Loans	-	-		-	+	-	-	0
Equities			+	-				0
fixed capital				+				+K
Net worth	-	-	-	-	0	-	-	-K
Sum	0	0	0	0	0	0	0	0

Model Structure – Transaction Flow Matrix

	Worker 1	Worker 2	Rentiers	Firms		Banks	Gov.	RoW	Sum
				Cur.	Cap.				
Consumption	-C_W1	-C_W2	-C_R	+C					0
Investment				+I	-I				0
Gov. Cons.				+G			-G		0
Exports				+Ex				-Ex	0
Imports				-Im				+Im	0
WB	+w1 * N1	+w2 * N2		-WB					0
Depr. Allow.				-DA	+DA				
Taxes	-T_W1	-T_W2	-T_R	-T_F			+T		0
Profits			+P_Fd	-P_F	+P_Fu				0
Int. Loans	-	-		-		+	-	-	0
Int. Deposits	+	+	+	+		-	+	+	0
*Sum	Sav	Sav	Sav	0Sav		0Sav		Sav = - CA	

Model Structure – Transaction Flow Matrix

	Worker 1	Worker 2	Rentiers	Firms		Banks	Gov.	RoW	Sum
				Cur.	Cap.				
*Sum	Sav	Sav	Sav	0 Sav		0 Sav		Sav = - CA	
<i>Changes in Stocks</i>									
Loans	+ ΔL_{W1}	+ ΔL_{W2}			+ ΔL_F	+ ΔL	+ ΔL_F	+ ΔL_{RoW}	0
Deposits	- ΔD_{W1}	- ΔD_{W2}	- ΔD_R		- ΔD_F	+ ΔD	- ΔD_G	- ΔD_{RoW}	0
Equities			- $\Delta E_{h_R} \cdot p_E$		+ $\Delta E_{s_F} \cdot p_E$				0
Sum	0	0	0	0	0	0	0	0	0

Model Structure – Production and employment

Production

$$(1) Y = \text{Cons} + I + G + \text{Ex} - \text{Im}$$

Employment

$$(2) N = Y / pr$$

$$(3) N_W1 = N * n_W1$$

$$(4) N_W2 = N * (1 - n_W1)$$

Cons = Consumption
I = Gross investment
G = Government expenditure
N = Employment
n = share in employment (ex)

Model Structure – Distribution

Functional Income Distribution

$$(1) \text{ WS} = 1 - \text{PS}$$

$$(2) \text{ Pg_F} = \text{PS} * Y$$

Wage distribution

$$(3) \text{ WB} = \text{WS} * Y$$

$$(4) \text{ wa} = \text{WB} / N$$

$$(5) \text{ w}_{\text{Worker2}} = \text{wa} * \text{wm}_{\text{Worker2}}$$

$$(6) \text{ w}_{\text{Worker1}} = (\text{WB} - N_{\text{Worker2}} * \text{w}_{\text{Worker2}}) / N_{\text{Worker1}}$$

WS = Wage Share

PS = Profit Share (ex)

Pg_F = Gross Profits

WB = Wage Bill

wa = average wage rate

$\text{wm}_{\text{Worker2}}$ = wage multiple (ex)

w = wage rate

N = employment

Model Structure – Firms Profit Distribution

$$(1)Pg_F = PS * Y$$

$$(2)inet_F = r_L(-1) * L_F(-1) \dots$$

$$\dots - r_D(-1) * D_F(-1)$$

$$(3)T_F = \max(t_F * (Pg_F - inet_F - DA) , 0)$$

$$(4)P_F = Pg_F - inet_F - DA - T_F$$

$$(5)P_Fd = \max(P_F * (1 - RR) , 0)$$

$$(6)DpS = P_Fd / Es_F(-1)$$

$$(7)P_Fu = P_F - P_Fd$$

Pg_F = Gross Profits
 $inet_F$ = net interest payments
 r_L = interest loans (ex)
 r_D = interest deposits (ex)
 L_F = outstanding loans
 D_F = Deposits of firms
 T_F = Sum of Taxes Firms
 t_F = tax rate firms (ex)
 DA = Depreciation Allowances
 P_F = net profits
 P_Fd = distributed profits
 RR = retention ratio
 DpS = Dividend per share
 Es_F = number of outstanding shares
 P_Fu = undistributed profits

Model Structure – Capital stock

Capital Stock

$$(1) K = K(-1) + I(-1) - DA(-1)$$

Depreciation

$$(2) DA = \delta * K(-1)$$

Utilization

$$(3) Y_{fc} = K / COR$$

$$(4) u = Y / Y_{fc}$$

Investment

$$(5) I = I_{net} + DA$$

$$(6) I_{net} = gr_K * K(-1)$$

$$(7) gr_K = \beta_1 + \beta_2 * u(-1) + \beta_3 * PS(-1) - \beta_4 * r_L(-1) + \beta_5 * (P_Fu(-1) + DA(-1))/K(-1)$$

K = capital stock

I = gross investement

DA = depr. allow. = depreciation

Y_{fc} = Y at full capacity

COR = Capital output ratio

u = utilization rate

I_{net} = net investment

gr_K = growth of capital stock

PS = profit share

r_L = Loan rate

P_Fu = retained profits

Model Structure – Firm Finance

External Finance Demand

$$(1) \text{exFD}_F = I - P_{Fu} - DA$$

Share issues

$$(2) E_{\text{issued}} = \text{exFD}_F / p_E(-1) * \text{EFR}$$

$$(3) E_{sF} = E_{sF}(-1) + E_{\text{issued}}$$

Bank Finance

$$(4) \text{BankBalance}_F = \text{BankBalance}_F(-1) \dots \\ \dots - \text{exFD}_F + E_{\text{issued}} * p_E$$

exFD_F = external finance
demand

I = gross investement

DA = depr. allow. = depreciation

P_{Fu} = retained profits

E_{issued} = number of shares
issued

p_E = equity price

EFR = equity finace ratio (ex)

E_{sF} = equity supplied by firms
(total number outstanding shares)

Bankbalance = net balance with
banks

Model Structure – Rentier Households

Income

$$(1) Yg_R = D_R(-1) * r_D(-1) + Eh_R(-1) * DpS$$

$$(2) T_R = \max(t * (Yg_R) , 0)$$

$$(3) Yd_R = Yg_R - T_R$$

Consumption

$$(4) C_R = pc_R * Yd_R(-1) + pcV_R * V_R(-1)$$

Wealth

$$(5) V_R = V_R(-1) + Yd_R - C_R + CG_E$$

$$(6) CG_E = (p_E - p_E(-1)) * Eh_R(-1)$$

Yg = Gross income

D = Deposits

r_D = interest deposits (ex)

Eh_R = total shares held

DpS = Dividend per share

T_R = Taxes paid

t = tax rate (ex)

Yd = disposable income

C_R = consumption

pc_R = propensity to consume out of income

pcV_R = propensity to consume out of wealth

CG_E = capital gains equity

V_Re = expected wealth

gr_Y = GDP growth

Model Structure – Rentier Households

Tobinesque portfolio distribution

$$(1) D_R/V_Re = \theta_0 + \theta_1 * r_D - \theta_2 * DpS/p_E(-1) + \theta_3 * Yd_R/V_Re$$

$$(2) \quad p_E * Eh_{R/V_{Re}} = (1 - \theta_0) - \theta_1 * r_D + \theta_2 * DpS/p_E(-1) - \theta_3 * Yd_{R/V_{Re}}$$

Model equations

$$(3) \quad E_{h_R} = E_{s_F}$$

$$(4) \quad p_E = (((1 - \theta_0) - \theta_1 * r_D + \dots \\ \theta_2 * DpS/p_E(-1)) * V_{Re} - \theta_3 * Yd_R) / Eh_R$$

$$(5) D_R = V_R - p_E * Eh_R$$

(6) $V_{Re} = V_{R(-1)} * (1 + gr_Y(-1))$

D = Deposits
r_D = interest deposits (ex)
Eh_R = total shares held
Es_F = total share
 outstandings
DpS = Dividend per share
p_E = price equity
Yd = disposable income
V_R = Wealth rentiers
V_Re = expected wealth
gr_Y = GDP growth

Model Structure – Worker 2 Households

Income

$$(1) Yg_W2 = w2 * N_W2 + D_W2(-1) * r_D(-1)$$

$$(2) T_W2 = \max(t * (Yg_W2), 0)$$

$$(3) Yd_W2 = Yg_W2 - T_W2 - L_W2(-1) * r_L(-1)$$

Consumption

$$(4) C_W2 = pc_W2 * Yd_W2(-1) + \dots$$

$$\dots pcV_W2 * V_W2(-1)$$

Wealth

$$(5) V_W2 = V_W2(-1) + Yd_W2 - C_W2$$

Yg = Gross income

w = wage rate

N = employment

D = Deposits

r_D = interest on deposits (ex)

T_W2 = Taxes paid

t = tax rate (ex)

Yd = disposable income

L = Loans

r_L = interest on loans

C_W2 = consumption

pc_W2 = propensity to consume
out of income

pcV_W2 = propensity to consume
out of wealth

Model Structure – Worker 1 Households

Income

$$(1) Yg_W1 = w1 * N_W1 + D_W1(-1) * r_D(-1)$$

$$(2) T_W1 = \max(t*(Yg_W1) , 0)$$

$$(3) Yd_W1 = Yg_W1 - T_W1 - L_W1(-1) * r_L(-1)$$

Consumption

$$(4) C_W1 = (1-imit) * pc_W1 * Yd_W1(-1) \dots \\ + imit * C_W2 + pcV_W1 * D_W1$$

(5) Wealth

$$(5) V_W1 = V_W1(-1) + Yd_W1 - C_W1$$

Yg = Gross income

w = wage rate

N = employment

D = Deposits

r_D = interest on deposits (ex)

T_W1 = Taxes paid

t = tax rate (ex)

Yd = disposable income

L = Loans

r_L = interest on loans

C_W2 = consumption worker 2

C_W1 = consumption worker 1

pc_W1 = propensity to consume
out of income

pcV_W1 = propensity to consume
out of wealth

$Imit$ = degree of emulation (ex)

Model Structure – Government

$$(1) G = G(-1) * (1 + gr_G)$$

$$(2) gr_G = gr_Y(-1) + \\ \dots (0.03 - (def_Gov(-1) / Y(-1)))$$

$$(3) T = T_W1 + T_W2 + T_R + T_F$$

$$(4) def_Gov = G - T + L_Gov(-1) * r_L(-1) - \dots \\ D_Gov(-1) * r_D(-1)$$

$$(5) V_Gov = V_Gov(-1) - def_Gov$$

G = government expenditure

gr_G = expenditure growth

gr_Y = GDP growth

Y = GDP

Def_Gov = Government deficit

T = total tax revenues

D = Deposits

r_D = interest on deposits (ex)

L = Loans

r_L = interest on loans

V_Gov = Wealth

Model Structure – Banks

$$(1) r_D = r$$

$$(2) r_L = r$$

$$(3) L = L_F + L_{W1} + L_{W2} + L_{Gov} + L_{RoW}$$

$$(4) D = D_F + D_{W1} + D_{W2} + D_R + D_{Gov} + D_{RoW}$$

$$(5) V_{Banks} = L - D = 0$$

D = Deposits

r_D = interest on deposits (ex)

L = Loans

r_L = interest on loans (ex)

Model Structure – RoW

$$(1) \text{Im} = \text{plm} * Y$$

$$(2) \text{Ex} = \text{Ex}(-1) * (1 + \text{gRoW})$$

$$(3) \text{CA} = \text{Ex} - \text{Im} - r_D(-1) * D_RoW(-1) \dots$$

$$\dots + r_L(-1) * L_RoW(-1)$$

$$(4) V_RoW = V_RoW(-1) - \text{CA}$$

plm = propensity to import

Y = GDP

Ex = exports

gRoW = growth rate RoW

CA = current account

r_D = interest on deposits

r_L = interest on Loans

L = Loans

D = Deposits

V = Wealth



FESSUD annual conference 2015:
Impacts of Financialisation on Society, Environment, and Economy
Financialisation, Debt and Inequality –
Preliminary results for D11.05

BASELINE AND EXPERIMENTS

Baseline and experimentation strategy

- Creation of two baselines cases with same parameters except emulation
 - One case (baseline 1) without emulation effects (imit = 0)
 - Expected to tend to the export led mercantilist type of development
 - One case (baseline 2) with emulation (imit = 0.5)
 - Expected to tend to the debt led private demand type of development
- Expose both baselines to the same shocks
 - Increase in profit share from 0.4 to 0.5
 - Increase in wage dispersion from worker 2 wage rate 122% of worker 1 wage rate to 185%
 - Increase in wage dispersion from worker 2 wage rate 122% of worker 1 wage rate to 185% with financial constraint / regulation
- Comparison of the results to reflected on the impact of further increases in inequality

FESSUD annual conference 2015:
Impacts of Financialisation on Society, Environment, and Economy
Financialisation, Debt and Inequality –
Preliminary results for D11.05

INTRODUCING THE BASELINES

The Baselines compared

	Baseline 1: no emulation	Baseline 2: 50 % emulation
GDP comp. to Baseline 1	100.0%	101.3%
Capital Stock comp. to Baseline 1	100.0%	101.3%
utilization rate	68.4%	68.4%
Shares in GDP		
Net Investment to GDP	10.2%	10.2%
Depreciation to GDP	14.1%	14.1%
Consumption to GDP	50.3%	50.8%
Government expenditure to GDP	24.6%	24.6%
Gross Investment to GDP	24.4%	24.4%
TradeBalance to GDP	0.7%	0.3%

	Baseline 1: no emulation	Baseline 2: 50 % emulation
Imports to GDP	30.0%	30.0%
Exports to GDP	30.7%	30.3%
Cons. Worker 1 to GDP	19.6%	20.1%
Cons. Worker 2 to GDP	21.7%	21.7%
Cons. Rentier to GDP to GDP	9.0%	9.0%
Net financial wealth to GDP ratios		
Worker 1	23.1%	6.8%
Worker 2	114.2%	114.2%
Rentier	108.5%	108.5%
Firms	-127.8%	-127.8%
Rest of the World	-29.4%	-13.1%
Government	-88.7%	-88.7%

FESSUD annual conference 2015:
Impacts of Financialisation on Society, Environment, and Economy
Financialisation, Debt and Inequality –
Preliminary results for D11.05

EXPERIMENT 1: INCREASE IN THE PROFIT SHARE

Experiment 1: increase in the profit share

	Without Emulation			With Emulation	
	Baseline 1	higher profit share		Baseline 2	higher profit share
GDP compared to Baseline	100%	95.0%		100%	94.7%
Capital Stock compared to Baseline 1	100%	99.5%		100%	99.2%
utilization rate	68.4%	65.3%		68.4%	65.3%
Shares in GDP					
Net Investment	10.2%	10.7%		10.2%	10.7%
Depreciation	14.1%	14.8%		14.1%	14.8%
Consumption	50.3%	47.3%		50.7%	47.6%
Government expenditure	24.6%	24.9%		24.5%	24.8%
Gross Investment	24.4%	25.5%		24.3%	25.5%
TradeBalance	0.7%	2.3%		0.3%	2.0%

Experiment 1: increase in the profit share

	Without Emulation		With Emulation	
	Baseline 1	higher profit share	Baseline 2	higher profit share
Cons. Worker 1	19.64%	16.36%	20.07%	16.72%
Cons. Worker 2	21.71%	18.10%	21.71%	18.10%
Cons. Rentier	8.98%	12.82%	8.98%	12.82%
Net financial wealth to GDP ratios				
Worker 1	23.14%	19.30%	6.80%	5.70%
Worker 2	114.25%	95.20%	114.20%	95.20%
Rentier	108.54%	158.60%	108.50%	158.60%
Firms	-127.78%	-87.80%	-127.80%	-87.80%
Rest of the World	-29.43%	-96.60%	-13.10%	-83.00%
Government	-88.71%	-88.70%	-88.70%	-88.70%

Summary of the results for increased profit share

- qualitatively the same developments for both experiments
 - Slow down in growth for a sustained period and lower GDP level in the steady state
 - A shift of GDP composition away from consumption towards investment
 - Improvement in the trade balance
 - Improvement of financial balance of firms and rentiers, deterioration of workers and RoW

- Stronger negative effect in Baseline 2 scenario

FESSUD annual conference 2015:
Impacts of Financialisation on Society, Environment, and Economy
**Financialisation, Debt and Inequality –
Preliminary results for D11.05**

EXPERIMENT 2: INCREASE IN WAGE DISPERSION

Experiment 2: Increase in wage dispersion

	Without Emulation		With Emulation	
	Baseline 1	higher wage dispersion	Baseline 2	higher wage dispersion
GDP compared to Baseline	100%	98.8%	100%	110.7%
Capital Stock compared to Baseline 1	100%	98.8%	100%	110.7%
utilization rate	68.4%	68.4%	68.4%	68.4%
Shares in GDP				
Net Investment	10.2%	10.2%	10.2%	10.2%
Depreciation	14.1%	14.1%	14.1%	14.1%
Consumption	50.3%	49.9%	50.8%	53.7%
Government expenditure	24.6%	24.6%	24.6%	24.6%
Gross Investment	24.4%	24.4%	24.4%	24.4%
TradeBalance	0.7%	1.1%	0.3%	-2.6%

Experiment 2: increase in wage dispersion

	Without Emulation		With Emulation	
	Baseline 1	higher wage dispersion	Baseline 2	higher wage dispersion
Cons. Worker 1	19.6%	15.3%	20.1%	19.0%
Cons. Worker 2	21.7%	25.7%	21.7%	25.7%
Cons. Rentier	9.0%	9.0%	9.0%	9.0%
Net financial wealth to GDP ratios				
Worker 1	23.1%	18.0%	6.8%	-135.6%
Worker 2	114.3%	135.0%	114.2%	135.0%
Rentier	108.5%	108.5%	108.5%	108.5%
Firms	-127.8%	-127.8%	-127.8%	-127.8%
Rest of the World	-29.4%	-45.1%	-13.1%	108.5%
Government	-88.7%	-88.7%	-88.7%	-88.7%

Summary results for increased wage dispersion

Without emulation

- Contractive effect, lower GDP level
- Reduced share of consumption in GDP
- Improved trade balance
- W2 balance improved
- W1 balance deteriorated
- RoW balance deteriorated

With emulation

- Expansionary effect, higher GDP level
- Increased share of consumption in GDP
- Deteriorating trade bal.
- W2 balance improved
- W1 balance becomes negative
- RoW balance improved

FESSUD annual conference 2015:
Impacts of Financialisation on Society, Environment, and Economy
Financialisation, Debt and Inequality –
Preliminary results for D11.05

EXPERIMENT 2.1: INCREASE IN WAGE DISPERSION IN BASELINE 2 WITH FINANCIAL CONSTRAINTS

Experiment 2.1: Increase in wage dispersion in Baseline 2 with financial constraints

Changed consumption function of Worker 1 households

$$(1) \quad C_W1D = (1-imit) * pc_W1 * Yd_W1(-1) + imit * C_W2 + pcV_W1 * D_W1$$

Consumption demanded defined as before

$$(2) \quad C_W1 = z99 * C_W1D + z100 * (C_W1D - (C_W1D - Yd_W1(-1)) * L_W1(-1)/Yd_W1(-1)/PrudRat)$$

$$(3) \quad z99 = 1 \text{ iff } C_W1D < Yd_W1; \text{ else } 0$$

$$(4) \quad z100 = 1 \text{ iff } C_W1D > Yd_W1; \text{ else } 0$$

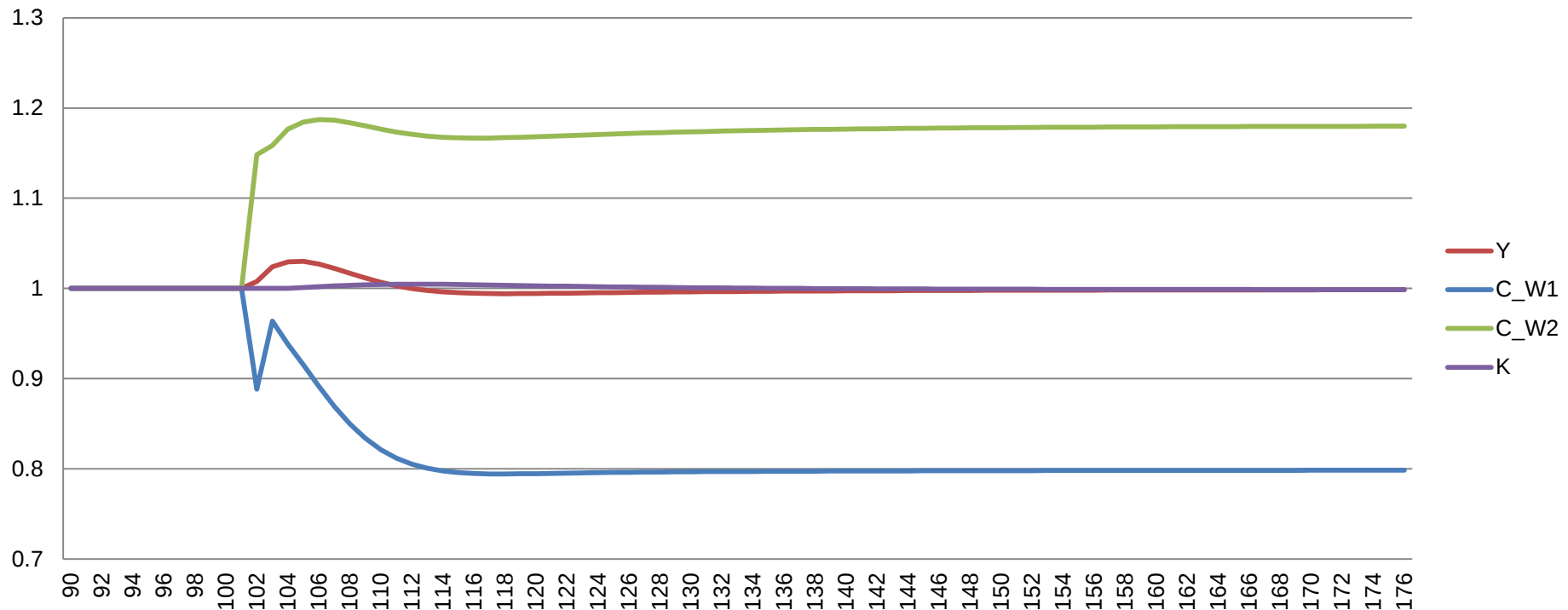
if consumption below income → Actual consumption = demanded consumption

if consumption above income →

Actual consumption = demanded consumption - penalty (depending on debt to income ratio and a prudential ratio)

Experiment 2.1: Increase in wage dispersion with financial constraints

Differences from Baseline 2 with financial constraints after an increase of wage dispersion



Experiment 2.1: Increase in wage dispersion with financial constraints

	Baseline 2	higher wage dispersion	higher wage dispersion - with financial regulation
GDP compared to Baseline 2	100%	110.70%	99.87%
Capital Stock compared to Baseline 2	100%	110.70%	99.87%
utilization	68.39%	68.39%	68.39%
Shares in GDP			
Net Investment	10.24%	10.24%	10.24%
Depreciation	14.13%	14.13%	14.13%
Consumption	50.76%	53.67%	50.69%
Government expenditure	24.56%	24.59%	24.59%
Gross Investment	24.36%	24.36%	24.36%
TradeBalance	0.32%	-2.62%	0.36%

Experiment 2.1: Increase in wage dispersion with financial constraints

	Baseline 2	higher wage dispersion	higher wage dispersion - with financial regulation
Cons. Worker 1	20.1%	19.0%	16.1%
Cons. Worker 2	21.7%	25.7%	25.7%
Cons. Rentier	9.0%	9.0%	9.0%
Net financial wealth to GDP ratios			
Worker 1	6.8%	-135.6%	-12.3%
Worker 2	114.2%	135.0%	135.0%
Rentier	108.5%	108.5%	108.5%
Firms	-127.8%	-127.8%	-127.8%
Rest of the World	-13.1%	108.5%	-14.7%
Government	-88.7%	-88.7%	-88.7%

Summary results for increased wage dispersion with financial constraint

Without financial constraints

- Expansionary effect, higher GDP level
- Increased share of consumption in GDP
- Deteriorating trade bal.
- W2 balance improved
- W1 balance becomes negative
- RoW balance improved

With financial constraints

- Initial expansionary effect, then contractive effect, lower GDP level
- Reduced share of consumption in GDP
- Improved trade balance
- W2 balance improved
- W1 balance becomes negative
- RoW balance deteriorated

FESSUD annual conference 2015:
Impacts of Financialisation on Society, Environment, and Economy
**Financialisation, Debt and Inequality –
Preliminary results for D11.05**

CONCLUSIONS AND FORESIGHTS

Conclusions / Foresight

- In the face of further increasing **functional income inequality** the model suggests
 - For each individual country a shift towards the export led mercantilist type of development
 - Contractive effects in the transitionary phase,
 - lower levels of GDP, lower utilization rate and
 - a relative shift of demand towards investment expenditure and exports
 - if world demand growth is unaffected by the slow down

Conclusions / Foresight II

- In the face of further increasing **personal and wage income inequality** the model suggests
 - For individual countries where emulation effects play an important role a tendency towards the **private debt led demand type** of development
 - Expansive effects in the transitional phase,
 - a higher long run GDP level,
 - a relative shift of demand towards consumption,
 - deteriorating trade balance,
 - Potentially unsustainable debt accumulation in lower income household sector and deteriorating international investment position.
 - Each countries where emulation effects are only of minor importance or the access to debt for low income households is restricted (already high debt levels, prudential regulation, balance sheet recessions) a tendency towards the **export led type of development**
 - depressive effects in the transitional phase,
 - a lower long run GDP level,
 - a relative shift of demand towards exports,
 - Improving trade balance,
 - High export dependence and improving international investment position

Conclusions / Foresight III

- Two potential scenarios for the Euro Area:
 - Scenario 1:
 - Sufficiently high number of countries can follow the private demand led type of development
 - Growth for a sustained period, also for export led countries, and balanced EA external accounts, but ...
 - » ... increasing debt balances within countries may lead to financial instability
 - » ... Imbalances within the Euro area will rise again
 - Scenario 2:
 - More countries follow or **have to** follow the export led type of development
 - Growth in the Euro Area will be weak, Euro area as a whole will turn export dependend and be a drag on world growth

Thank you for your attention