Presentation summary:

1. Kalecki’s profit equation
2. Budget deficit – governments irresponsibility or economic necessity?
3. Why stagnation tendency is stronger in the EMU than in the USA?
1. Kalecki’s profit equation (a)

\[ P = IP + (G-T) + (X-M) - (YH-CP) \]

\[ P = IP + D + NE - SH \]  \hspace{1cm} (1)

- **P**: after tax non-distributed (gross) profit (inside savings)
- **IP**: (gross) private investment (including residential building)
- **G, T, and D=(G-T)**: government expenditure, taxes, and budget deficit
- **X, M, and NX=(X-M)**: exports, imports, and net exports
- **YH, CP, and SH=(YH-CP)**: after tax households income, consumption and (outside, mostly rentier’s) savings
\[ P = IP + D + NX - SH \] (1)

Non-distributed profits increase, when
- \( IP \), private investment, increases
- \( D \), budget deficit, increases
- \( NX \), net export, increases
- \( SH \), households savings, decrease

- Full employment and austerity – interpreted according to (1)

Y: national income; assuming a closed economy without government and
\( \alpha \): the share of \( YH \) in \( Y \) we get

\[ Y = P/(1 - \alpha) \] (2)

at given distribution of national income, \( Y \) is an increasing function of profits, and given profits, \( Y \) is a decreasing function of the share of profits.
2. Budget deficit: Governments irresponsibility or economic necessity? (a)

From (1) we get

\[
SH - (IP - P) = D + NX \quad (3)
\]

\[
NPS = D + NX \quad (3')
\]

- **SP = (SH+P) and (SP-IP) = NPS**, net private savings must be equal to budget deficit plus export surplus, D+NX.
- **NPS=NAFA**, Net Acquisition of Financial Assets by the private sector.

NAFA>0 means that the private sector increases its financial assets; it is possible if – and only if – it is compensated by the Government (D>0) and/or by the Rest of the Word (NX>0) i.e by decrease of their assets. Private sector can save more than it invests (can underspend) when its net savings are matched by accumulation of Government bonds or foreign financial assets (implying they overspend).
The consistency of financial balances

NPS > 0, (D + NE) > 0

NPS < 0, (D + NE) < 0

NPS_1

NPS_0

Y

D

E

D_0 + NE_0

D_1 + NE_1

Y_A

Y_B

Y_1

Y_2

Y_0
Points $Y_A$ and $Y_B$: GDP determined by supply side or demand side factors, the main difference between the mainstream and the Keynes-Kalecki approach:

- $Y_A$: Say’s law rules: unemployment is always a structural problem, mostly the result of inflexible labour markets; otherwise $Y_A$ potential output
- $Y_B$: Effective demand rules: $Y_A$ is the upper limit of output. Real output and employment are determined by aggregate demand, first of all by investment. At investment, $IP_0$, and savings function, $SP_0$, net output can be only equal to $Y_B$. At $Y_B$ the “savers” (the underspenders), represented by private households $SH$, and “takers” (the overspenders), represented by $(IP-P)$, match each other.

Point $Y_C$: At GDP higher than $Y_B$, savings will be higher than investment. In particular at point C, NPS are equal to the distance $Y_0C$. Thus, that part of output cannot be sold within the private sector, it represents unwanted increase of inventories and production will be cut to the level $Y_B$. However, the existence of the Government and/or the RoW sectors may create conditions, under which output $Y_0$ can be sold: $(D+NX)$ has to be equal to the distance $Y_0C$.

Points $Y_1$ and $Y_2$: shift of NPS to the left; fiscal responsibility versus fiscal austerity.
2. Budget deficit: Governments irresponsibility or economic necessity? (c)

Private and public sector financial balances, worldwide, 1971-2011
(in % of world GDP)

Note: Figures above zero denote a surplus and below zero a deficit. Surpluses indicate additions to the net stock of financial wealth, and deficits indicate additions to the stock of debt. Except for small errors of measurement and aggregation of large numbers, the surpluses and deficits mirror each other.

2. Budget deficit: Governments irresponsibility or economic necessity? (d)

- Till 1990 D more stable, about 3% of GDP; after 1990 D less stable, about 2%; twice a sharp decrease of D: one preceding the dot com bubble 2001, and the other is Great Financial Crisis (GFC) of 2008

- EMU for the same period: NX almost zero; therefore D about 4-5%, representing also NPS

NPS = D is a stable solution in terms of private households and firms
3. Why stagnation tendency is stronger in the EMU than in the USA? (a)

7 years after 2008 the GDP and GDP per capita of EMU still below the 2008 volumes, worse than during the crisis in the 1930s and worse than in USA and Japan.

The main problem - the right diagnosis of the crisis and of the derived therapy:

- In the USA: a private sector speculation bubble and a partly Keynesian therapy; not deep enough but at the end leading to growth, although not spectacular.

- In the EMU area, starting in 2010: the underlying cause of the crisis – allegedly lack of confidence provoked by increased debt of the states; fiscal profligacy should be replaced by fiscal austerity; austerity would restore confidence and actually create jobs, not destroy them.

However, it is not a “sovereign debt crisis” but a banking and balance of payment crisis, aggravated by the structure of EMU and German policy of wage deflation since the late 1990thies.
3. Why stagnation tendency is stronger in the EMU than in the USA? (b)

The GFC has started in the US as private overdebt sector required massive state help manifesting itself in huge budget deficits $D$ (increase by 8,3 p.p.) while the private sector has turned from a overspender to an underspender (by 10,5 p.p.). GDP declined over both years by 3,1% and restarted growth with at $D$ declining slowly at about constant $NX$ to

<table>
<thead>
<tr>
<th>USA</th>
<th>2007</th>
<th>2009</th>
<th>$\Delta$</th>
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<tbody>
<tr>
<td>SP-IP</td>
<td>-1,4%</td>
<td>9,1%</td>
<td>10,5 p.p.</td>
</tr>
<tr>
<td>D</td>
<td>3,5%</td>
<td>11,8%</td>
<td>8,3 p.p.</td>
</tr>
<tr>
<td>NX</td>
<td>-4,9%</td>
<td>-2,7%</td>
<td>2,2 p.p.</td>
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<tr>
<th></th>
<th>2010</th>
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<th>2012</th>
<th>2013</th>
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<tbody>
<tr>
<td>2010</td>
<td>2,5%</td>
<td>1,8%</td>
<td>2,8%</td>
<td>1,9%</td>
<td>2,8%</td>
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<tr>
<td>2010</td>
<td>12,0%</td>
<td>10,6%</td>
<td>9,2%</td>
<td>6,2%</td>
<td>5,4%</td>
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3. Why stagnation tendency is stronger in the EMU than in the USA? (c)

<table>
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<tr>
<th>EMU</th>
<th>2007</th>
<th>2009</th>
<th>Δ</th>
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<tbody>
<tr>
<td>IP</td>
<td>19,3%</td>
<td>16,1%</td>
<td>-3,2 p.p.</td>
</tr>
<tr>
<td>SP</td>
<td>20,5%</td>
<td>22,7%</td>
<td>2,2 p.p.</td>
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together (SP-IP) increased from 1,2% to 6,6% i.e. by 5,4 p.p. parallel to changes in D

| D    | 0.7%   | 6.1%   |

GDP declined by 4,5% in 2009 and growth restarted in 2010. However, this year an austerity fiscal policy has been started leading to stagnating growth till 2014

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<tbody>
<tr>
<td>D</td>
<td>6,1%</td>
<td>4,1%</td>
<td>3,6%</td>
<td>2,8%</td>
<td>2,4%</td>
<td>-3,7 p.p.</td>
</tr>
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<th>2014</th>
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<tr>
<td>g(Y)</td>
<td>1,9</td>
<td>1,6</td>
<td>-0,7</td>
<td>-0,4</td>
<td>1,2</td>
</tr>
</tbody>
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NE from 0.5% 2010 to 3.1% 2014

consequences for EMU and the RoW

- The private sector debt overhang (first of all zombie banks, but also firms and private households) has barely fallen; the volume of D in USA and EMU over 2009-14;
- Its desire to save more did not meet Governments willingness to spend more. The EUM - a debtors’ prison.
The EMU does not need fiscal austerity, based on individual household behaviour (Swabian housewife’s understanding of macroeconomics) as proved by history and the experience of last years in Europe.

The EMU does need budget deficit financed investment in material and social infrastructure together with cleaning of private balances, foremostly of zombie banks.

It needs also to solve the problem of internal imbalances of CA.