

Is there an alternative strategy for reducing public debt by 2032 ?

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“Evidence-based Economic Policy in the Aftermath of the Crisis”

- **European countries face 2 interconnected problems**
 - Public debt has risen to record levels (ZE : 90,6 % du PIB en 2012 - Irlande : 117,6% - Grèce 156,9% - France 90,2%)
 - Growth has been severely impaired by the crisis / Unemployment remains at record levels
 - There is surely (at least in the short run) a tradeoff between reducing debt and enhancing growth. But there may also be cases where consolidation is self-defeating ! (Voir Holland & Portes, 2012)

■ Literature has emphasized 2 important features

- Fiscal multipliers may vary according to several factors (voir Creel, Heyer & Plane, 2011 - Auerbach & Gorodnichenko, 2012 – Corsetti, Meier & Müller, 2012...)

monetary policy (ZLB) /financial stress /unemployment ... business cycles

⇒ The higher the multiplier, the costlier the consolidation !

- The more output is depressed in the short run, the more it risks to be lowered in the long run)

Hysteresis effect / New « evidence » on stalling effect (Ho & Yetman, 2013)

■ It raises the issues of the optimal timing and of the strength of consolidation (Blanchard & Leigh, 2013)

- More now - Less (more ?) later (the case for frontloaded consolidation)
- Less now – More (less ?) later (the case for backloaded consolidation)

Methodology issues and related literature

- **The aim of the paper is then to provide scenarios for public debt and the cost of consolidation on a given horizon**
 - It involves defining sustainability of public debt
 - It involves indentifying the cost of consolidation

- **DSGE models / Structural models**
 - They may rely on stringent (though different) hypotheses, are not easily tractable
 - They may fail to consider the case where fiscal multipliers vary,

- **We consider a small-scale generic model**
 - Being able to embrace alternative theories
 - Being able to make a large set of sensitivity analyses

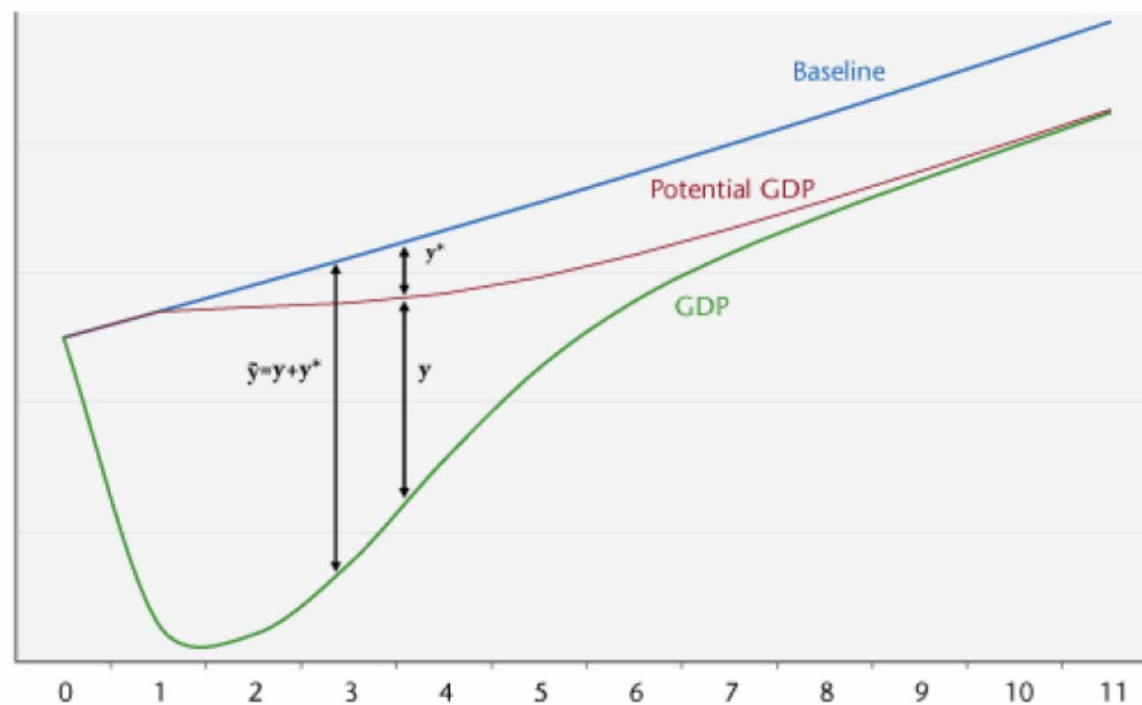
Quick description of the model

- Reduced-form model representing supply / demand
 - Multi-country model (currently 11 EZ members)
 - Interdependencies are captured by external trade and by common monetary policy
 - Prices are represented by a Phillips curve
 - A Taylor rule defines the stance of monetary policy
 - An attention is paid to the representation of fiscal policy
 - Expectations for long term interest rates are forward looking (terms structure of interest rates) / expected inflations are anchored (though they may be forward or backward looking),

Quick description of the model

- Let's consider \bar{Y} the baseline path for output. It comes that \tilde{Y} is defined as the gap between the log of real GDP and and this baseline path. Y^* is the gap between potential output and baseline. Then output gap Y is the difference between \tilde{Y} and Y^* .

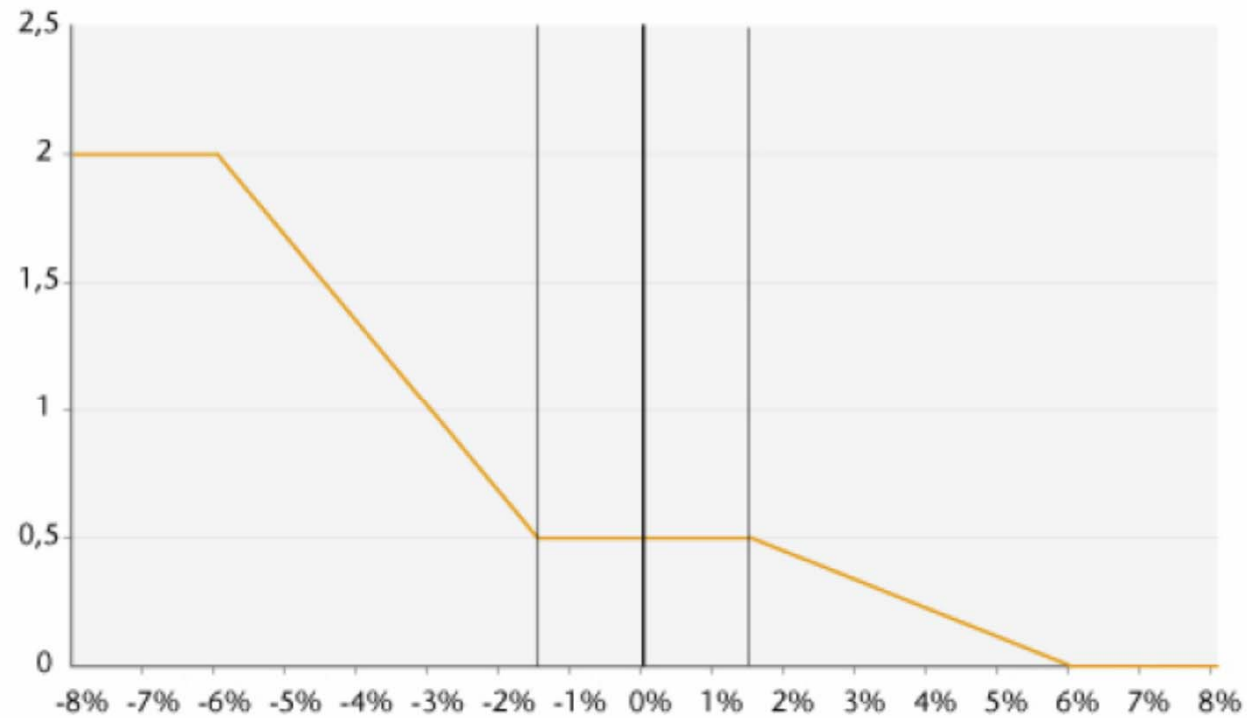
Figure 1. Example: GDP path and potential GDP path with hysteresis



Quick description of the model

- A variable fiscal multiplier

Figure 2. Example of the value of the multiplier according to the output gap



Note: $\mu_{max} = 2$, $\mu_0 = 0.5$, $\mu_{min} = 0$, $y_{min} = -6\%$, $y_{inf} = -1.5\%$, $y_{sup} = 1.5\%$, and $y_{max} = 6\%$. Values are taken as illustrative and may vary across countries.

Source: OFCE.

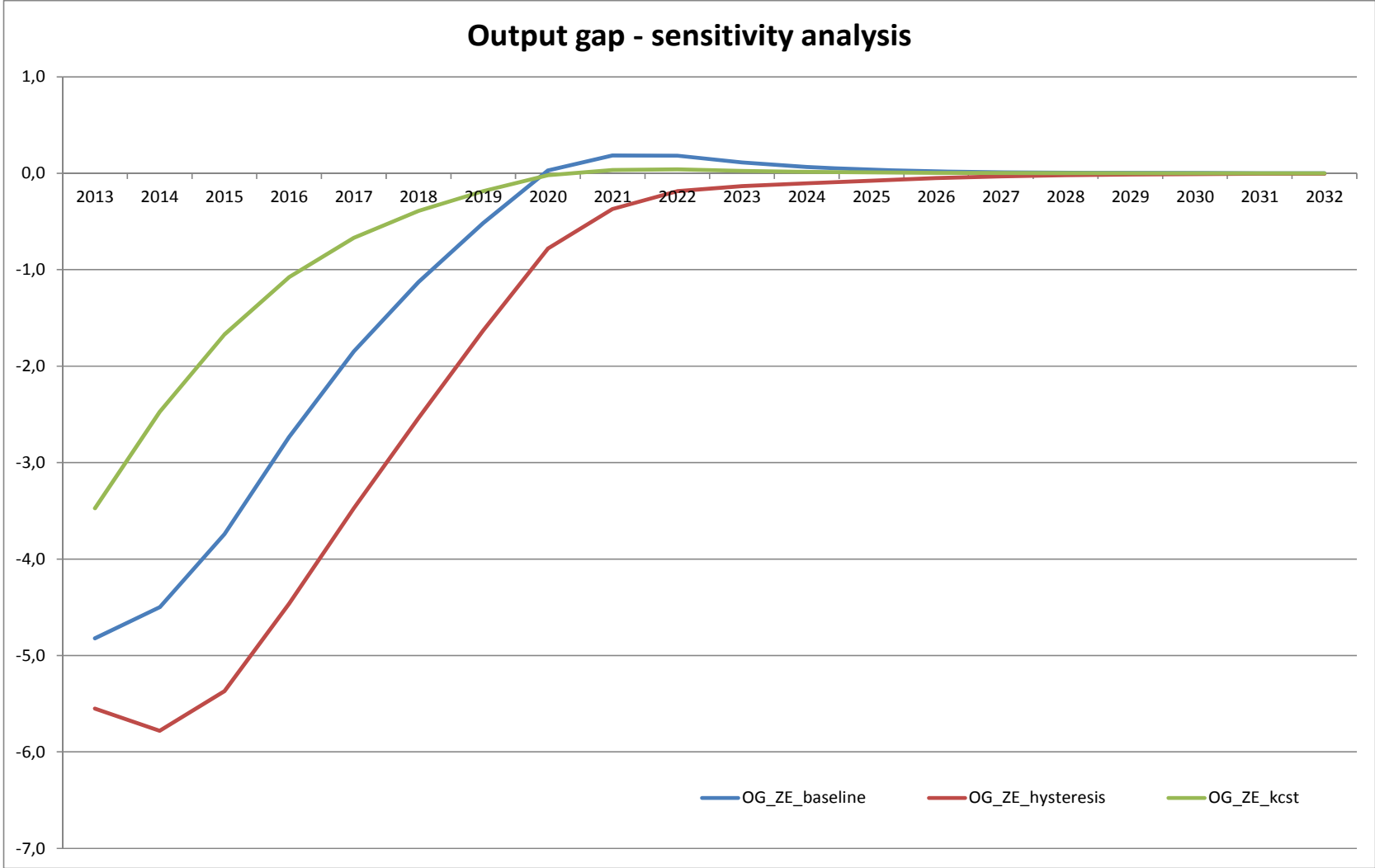
Some preliminary results

■ Baseline scenarios

	Public debt (% of GDP)			Cumulated fiscal impulse (% of GDP)	Structural balance (% of GDP)	Cumulated output gap		Public debt (% of GDP)			Structural balance (% of GDP)			Cumulated fiscal impulse (% of GDP)	Cumulated output gap
	2012	2017	2032	2013-2015	2032	2013-2032		2012	2017	2032	2013-2032	2017	2032	2013-2032	2013-2032
Germany	82	67	26	-0.3	1.8	-2.0	Spain	86	104	60	-3.7	-1.3	1.3	-8.2	-58.4
France	90	91	52	-2.9	0.2	-26.6	Portugal	119	137	60	-2.8	-0.1	3.7	-8.2	-55.1
Italy	127	109	18	-2.1	5.5	-18.5	Ireland	118	144	71	-5.0	-1.7	5.2	-13.7	-75.2
Spain	86	101	83	-4.3	-2.2	-40.3	Greece	177	206	84	-0.6	1.9	8.9	-15.5	-121.7
Netherlands	69	68	48	-2.9	-0.8	-12.3	Euro area	94	89	61	-1.0	-0.3	-0.5	-1.0	-17.9
Belgium	100	91	38	-2.2	1.8	-17.7									
Portugal	119	133	79	-4.7	0.7	-31.4									
Ireland	118	140	105	-5.7	-2.3	-49.9									
Greece	177	199	93	-7.5	3.0	-87.3									
Finland	53	45	8	-1.3	1.9	-4.2									
Austria	75	68	40	-1.9	0.3	-2.4									
Euro area	94	88	43	-2.2	1.2	-18.6									

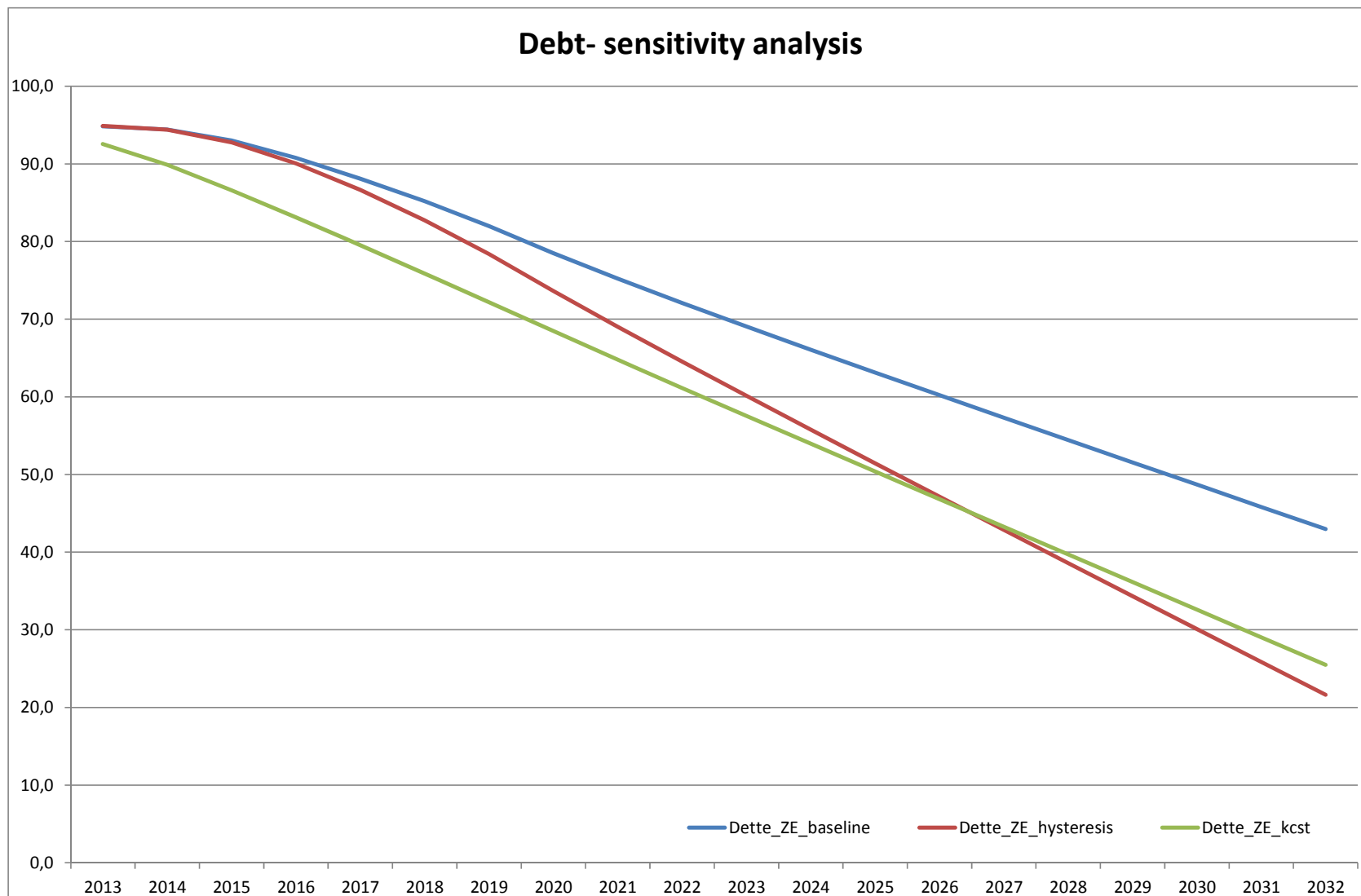
Some preliminary results

■ Sensitivity analysis

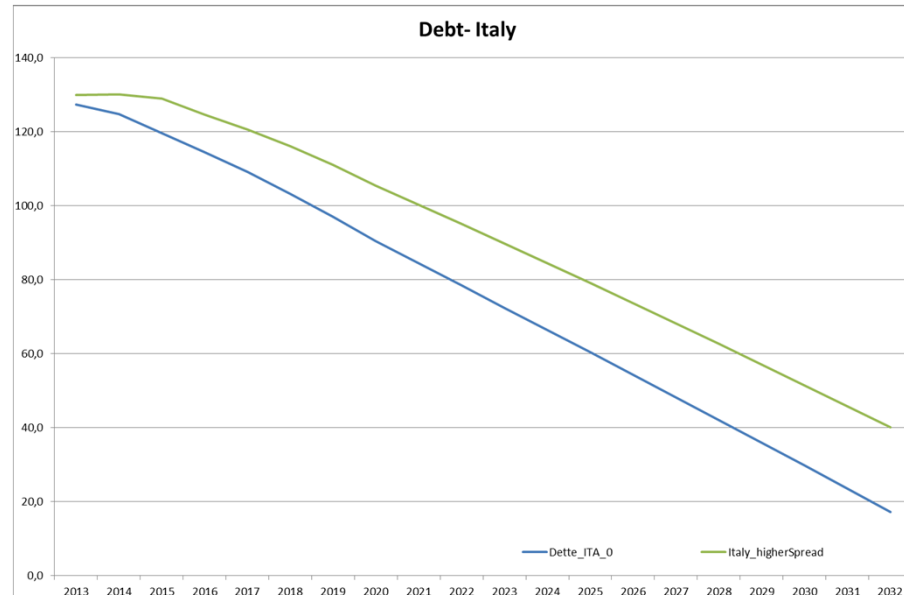
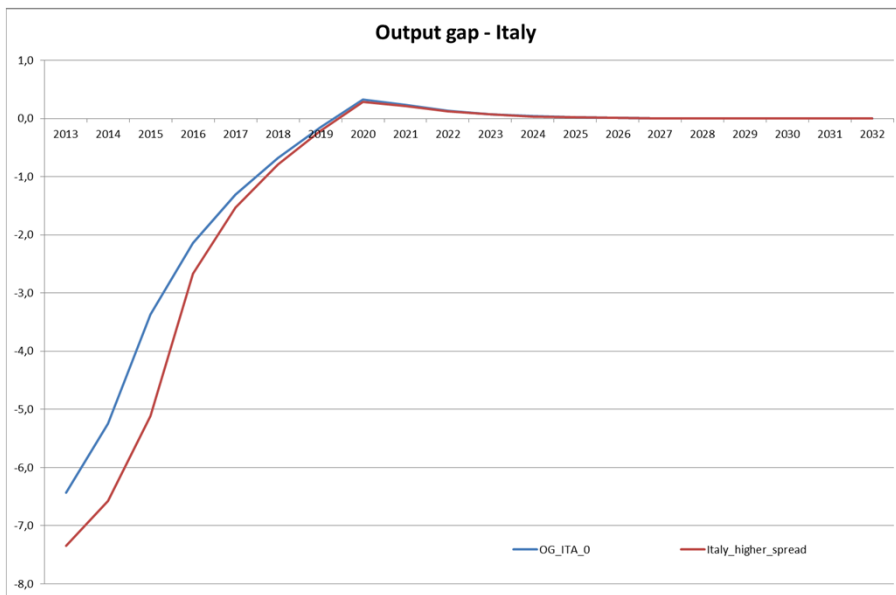
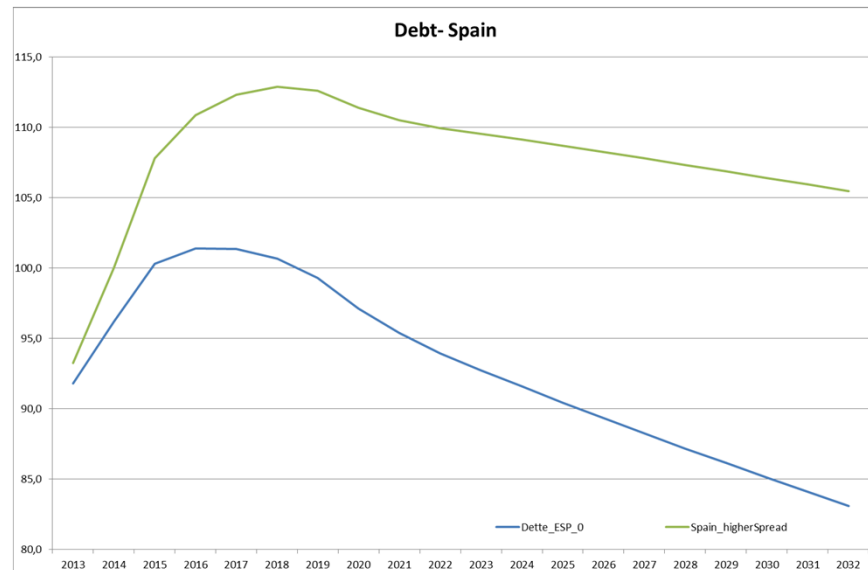
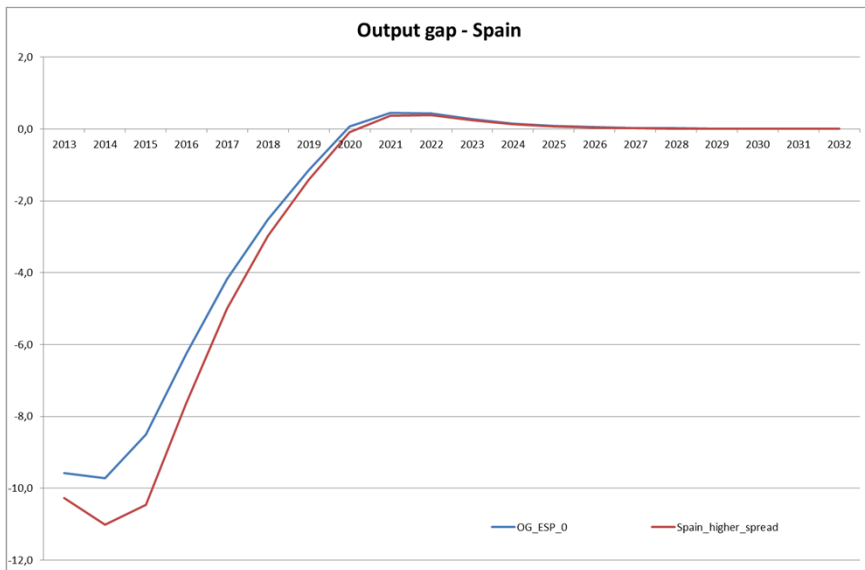


Some preliminary results

■ Sensitivity analysis



Some preliminary results (if spreads persist)



Is there an alternative strategy ?

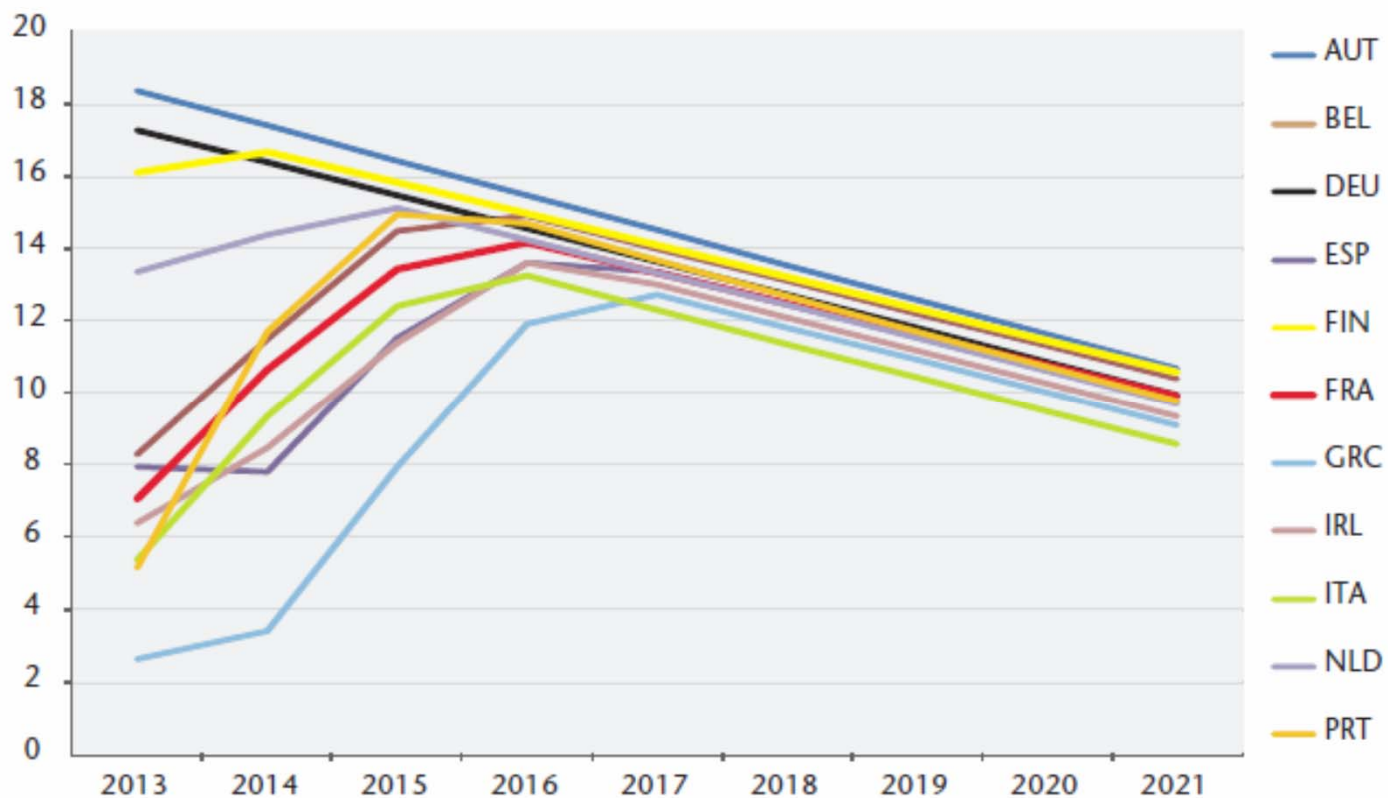
■ Spreading consolidation

	Public debt (% of GDP)			Structural balance (% of GDP)			Cumulated fiscal impulse (% of GDP)	Difference in average annual growth	
	2012	2017	2032	2012	2017	2032	2013-2032	2013-2017	2018-2032
Germany	82	72	60	0.3	-1.1	-1.3	1.8	0.1	0.0
France	90	86	60	-1.4	-1.0	-0.9	-1.3	0.3	0.0
Italy	127	104	60	0.3	-0.6	0.9	2.4	0.8	-0.2
Spain	86	96	60	-3.7	-2.6	0.8	-6.0	1.2	-0.1
Netherlands	69	69	60	-2.9	-1.5	-1.9	-1.9	0.1	0.0
Belgium	100	89	60	-0.9	-1.0	-0.7	0.4	0.4	-0.1
Portugal	119	119	60	-2.8	-0.9	1.9	-3.9	1.5	-0.2
Ireland	118	125	67	-5.0	-3.7	3.9	-9.5	2.2	-0.2
Greece	177	150	60	-0.6	0.8	3.5	-3.3	3.6	-0.3
Finland	53	54	60	0.2	-2.1	-3.0	2.0	0.2	-0.1
Austria	75	71	60	-2.5	-1.5	-1.5	-0.7	0.0	0.0
Euro area	94	90	62	-1.0	-1.3	-0.4	-0.4	0.6	0.0

Overview

■ Optimal timing of consolidation : an illustration

Figure 26. Debt reduction in 2032 for a 1.0 fiscal impulse on a given year, non linear model



Cycle dependant multiplier and hysteresis

Source : OFCE calculations

Is there an alternative strategy ?

■ Delaying consolidation

	Public debt (% of GDP)			Structural balance (% of GDP)			Cumulated fiscal impulse (% of GDP)	Difference in average annual growth		Starting date of fiscal impulses (sign of FI)
	2012	2017	2032	2012	2017	2032	2013-2032	2013-2017	2018-2032	
Germany	82	74	60	0.3	-1.3	-1.1	1.6	0.1	0.0	2013 (+)
France	90	86	60	-1.4	-1.2	-0.8	-1.1	0.5	0.0	2016 (-)
Italy	127	107	60	0.3	-0.7	1.3	1.9	0.6	-0.1	2013 (+)
Spain	86	95	60	-3.7	-4.0	2.4	-7.3	1.8	-0.3	2016 (-)
Netherlands	69	72	60	-2.9	-2.1	-1.6	-2.1	0.2	0.0	2015 (-)
Belgium	100	90	60	-0.9	-1.3	-0.5	0.1	0.4	-0.1	2013 (+)
Portugal	119	116	60	-2.8	-1.7	1.9	-3.3	2.0	-0.2	2015 (-)
Ireland	118	123	78	-5.0	-5.1	2.7	-8.0	2.7	-0.3	2016 (-)
Greece	177	141	60	-0.6	-0.3	2.8	-1.5	4.5	-0.4	2017 (-)
Finland	53	56	60	0.2	-2.3	-2.8	1.8	0.1	0.0	2013 (+)
Austria	75	72	60	-2.5	-1.6	-1.4	-0.9	0.0	0.0	2013 (-)
Euro area	94	88	60	-1.0	-1.6	-0.1	-0.7	0.7	-0.1	

Shortcomings, extensions and future researchs

- Extending the model to non EZ-countries
- Taking into account credit supply effects
- Endogenizing risk premium (taking into account the possibility of multiple equilibria, see Obstfeld or Sachs, Tornell & Velasco)
- Current account dynamics and private debt
- A full representation of the wage-price dynamics
- Endogenizing the long term growth rate
- Potential negative effects of public debt (Reinhart & Roggof – Minea & Villieu, 2011)

Conclusion and economic policy guidelines

- **Frontloading fiscal consolidation is costly and may be self-defeating**
- **An alternative strategy is possible**
 - It would be compatible with the existing fiscal rules (spreading)
 - It involves a strong commitment to reduce debt in the future when it will be less costly (in that sense it may be seen as credible !)
- **EMU need to...**
 - Promote a plan for enhancing growth, fiscal coordination and certainly a mechanism of mutualization
 - Rely on an active central bank, which would provide a guarantee stablization of public interest rates