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TCC / Fiscal Money Project

Biagio Bossone / Marco Cattaneo / Massimo Costa / Stefano Sylos Labini

THE ITALIAN ECONOMY DEMAND CRISIS

Italian 2017 GDP in real terms was 5.5% lower than in 2007. Domestic demand collapse is the main culprit: exports are up. Had GDP grown at the same rate than exports, 2017 GDP would have been € 241 billion (i.e. 14%) higher.

	2007	2011	2017	2017 vs 2007	%
GDP	1.816		1.716	-100	-5,5%
Consumptions	1.420		1.367	-52	-3,7%
Investments	392		319	-73	-18,5%
Exports	498		537	+39	+7,8%
Imports	505		485	-20	-4,0%
Trade balance	-7		+52		
People in absolute poverty (thousands)	1.789	2.652	5.000		

Source: ISTAT – preliminary 2017 data - € bln, constant 2017 prices

Structural, supply side reforms may increase the potential GDP, but can do little to close the output gap.

Demand expansion is **indispensable**.

The Indispensable Demand Expansion

From 2011, the Eurosystem has forced Italy to implement procyclical policies, which weighted heavily on demand, GDP and employment.

At that point, Italy had not yet fully recovered from the Lehman Crisis. In an already depressed environment, the Keynesian multiplier magnified the recessionary impact of ill-advised austerity measures.

If Italy will not stimulate demand, growth will remain weak and investment as well as employment will not meaningfully recover. The economic environment will keep deteriorating, as well as living conditions of a large share of the population.

Tax Credit Certificates (TCC) provide the necessary demand expansion, supporting growth through creation of new purchasing power.

TCC increase the purchasing power available to people and reduce the tax wedge for enterprises, without increasing public debt or leading to the breakup of the euro. They are meant to operate as a complementary medium of exchange to the euro.

TCC are a tax-backed “quasi-currency”.

How TCC Trigger a Strong Recovery

TCC would be accepted by the issuing state in exchange for equivalent reductions of financial obligations towards it - including taxes, social and pension contributions etc.

The Italian government can issue TCC to:

- Supplement wages.
- Reduce the tax wedge to enterprises.
- Expand social spending programs.
- Support public investments.

TCC would be issued ***free of charge*** to workers, families, enterprises etc., and would provide the right to reduce payments to the public sector, effective two years from the issuing date. Example: TCC issued in June, 2018 would provide the bearer with the right to tax rebates starting from June, 2020.

The two-year time delay allows GDP to grow and to generate additional gross tax revenues, which will offset the TCC-related tax rebates when TCC will come due.

As TCC provide to the bearer a safe future tax benefit, they are immediately valuable and negotiable (i.e. starting from their moment of issuance).

TCC will be worth their face value, net of a modest financial discount.

How TCC Provide Purchasing Power

A TCC holder can sell it in exchange for euros to investors, private individuals or enterprises, which will have to pay taxes in the future.

While they are not debt (see next section)[1] TCC are State-guaranteed securities. A large and liquid market will develop. A government agency (e.g. Cassa Depositi e Prestiti) could provide market making services.

TCC will also be accepted to pay for goods and services, on a voluntary basis, by a wide range of retailers, utilities companies etc., including State-affiliated entities such as ENI, ENEL, the national mail and railway systems, etc.

Complementary currencies already exist and work pretty well: the most successful case in Italy is Sardex. TCC acceptance will increase much quicker due to their embedded, guaranteed value as tax discounts.

In addition, the TCC recipient increases both his income and his net worth, which makes him more willing to spend his euro savings.

[1] The Ministry of Economy told us that TCC would be included in the public debt if they were purchased and held by a bank or financial institution. This is likely a misunderstanding. Commercial receivables are not part of the Maastricht Debt unless they are sold *pro-soluto* to a financial institution (see page 7), in which case they are reclassified as financial debt. But receivables must be paid in cash, which is not the case as of TCC.

TCC ARE NOT DEBT UNDER THE EU REGULATORY FRAMEWORK

TCC are not debt as there is no obligation for the issuer to reimburse them in cash at any point in time.

According to the Eurostat SEC 2010 system (see Regulation n. 549 / 2013, paragraphs 5.05 - 5.06) TCC are “non-payable tax credits”. Upon issuance, they are neither debts nor expenditures.

TCC must only be taken into account for *future* budget projections. These will have to factor in not just the revenue reductions due to the tax rebates but also the revenue increases due to the expansionary effect of TCC on GDP and gross tax receipts.

THE "MAASTRICHT DEBT" DOES NOT INCLUDE TAX CREDITS

Italy's Maastricht Debt as of 2017 year-end was as follows (see page 8, http://www.bancaditalia.it/pubblicazioni/finanza-pubblica/2018-finanza-pubblica/statistiche_FPI_20180215.pdf).

National Mail System deposit accounts	14
Other deposits + coins	159
Short-term securities	107
Medium- & long-term securities	1.805
Loans	127
EFSF liabilities	34
Other liabilities (*)	10
TOTAL	2.256

(*) Trade receivables sold *pro-soluto* to financial institutions (see reference above, page 24).

No tax credit is included, even if a wide range of non-payable tax credits already exist that can be used to offset tax liabilities (tax losses carryforward, rights to depreciate assets in excess of their purchasing price, rights to offset real estate restructuring costs against future income, etc.).

TCC ARE NON-DEFAULT SECURITIES

TCC must not be redeemed in cash. The issuer only commits to accepting them as offsets against future tax liabilities.

TCC are non-default securities and do not create systemic risks such as those associated with Eurozone sovereign debt.

Of course, TCC should not be issued without limit. Too many TCC in circulation would trigger unwarranted inflation by pushing demand for goods and services to exceed the economy's production capacity.

Having said that, when a significant output gap exists, TCC are an appropriate tool to recover full employment consistent with price stability.

TCC Do Not Violate ECB's Euro Issuance Monopoly

TCC are valuable since the issuing State accept them to offset tax liabilities.

While TCC are euro-denominated, they are not "legal tender" money.

They will be accepted as a mean of exchange on a voluntary basis only.

The euro will remain the exclusive legal tender money of the Eurozone, as well as its unit of account.

THE MEFO BILLS EPISODE

Germany ran the hugely successful MEFO Bills program in 1933-1937, under Minister of Economy and Reichsbank President Hjalmar Schacht.

While issued by a private company (actually an empty shell, Metallurgische Forschungsgesellschaft) MEFO Bills, much like TCC, were valuable since the government committed to accepting them as instruments to settle financial obligations.

MEFO Bills were used to finance a large government expenditure program, including public investments, which wiped out the 25% unemployment created by the 1929 Great Depression.

Germany experienced a very strong recovery and a remarkable increase in her industrial potential, which later on, unfortunately, became a springboard for the Nazi government warmongering.

TCC Allocation

TCC can both increase Italian internal demand and improve Italian enterprises' competitiveness.

Maximum annual issuances of € 100 billion could be allocated as follows:

- Supplementing wages, € 25 billion.
- Reducing the tax wedge on labor to enterprises, € 25 billion.
- Higher social spending programs, € 25 billion.
- Investment support, € 25 billion.

Wage supplements should be structured in a progressive fashion, mainly for the benefit of low- and middle-income workers.

Reducing the tax wedge on labor is key to immediately improve enterprise competitiveness and to avoid creating external trade imbalances.

Investment support should be primarily aimed at small, fast-deploying targets, such as local infrastructure maintenance, real estate restructurings, public housing, schools buildings upgrade, etc.

SAFEGUARDS

TCC *ceteris paribus* reduce future governmental receipts. Yet, based on conservative assumptions, this effect is more than offset by GDP growth generating additional tax revenues.

Having said that, safeguards can be pre-arranged that would be triggered *just in case* the TCC expansion effect will be lower than expected:

	2018	2019	2020	2021	2022 onwards
Supplementing wages	7.5	16.25	25	25	25
Reducing the tax wedge	7.5	16.25	25	25	25
Social expenditure	7.5	16.25	25	25	25
Investment support	7.5	16.25	25	25	25
Total TCC issued	30	65	100	100	100
TU = Total uses of TCC as tax discounts			***30***	***65***	***100***
VAT rates			15	32,5	50
Property taxes			7,5	16,25	25
Spending review			7,5	16,25	25
S = maximum potential safeguards			***30***	***65***	***100***

As TU = S in each single year, the TCC project fully guarantees that debt will never increase.

Safeguards (continued)

Based on the safeguard system as described, the TCC program will never raise the public debt. Starting from 2018, fiscal actions of equal size and timing (i.e. two years later) will be legislated.

Additional actions are also possible if deemed appropriate:

1. Offering to TCC holders (on a voluntary basis) to extend TCC maturities, in exchange for an increase in their face value.

2. Raising euros to reimburse debt by issuing long-term TCC.

3. In unlikely, extreme events: raising taxes and / or cutting expenses, while offering equivalent amounts of TCC as a compensation to agents for the losses suffered.

TERM COVERAGE OF TCC TAX DISCOUNTS

The TCC project assumes that the maximum amount of TCC coming to maturity (and therefore available to holders for effective tax rebates) would reach € 100 billion in 2022. This compares to current € 800 billion government revenues.

This implies a very large coverage ratio: the total amount of TCC that could be effectively used for tax rebates represents, at most, only a modest share of gross government revenues. The existence of such a large margin ensures that the value of TCC will always remain very proximate to the euro (that is, the discount at which TCC trades with the euro will be small).

Only considerably larger issuances than what is assumed by the TCC project might create saturation issues (causing too many TCC to come to maturity at the same time). Yet the numbers above indicate that this would be a highly unrealistic scenario.

MACROECONOMIC PROJECTIONS

We developed a set of forecasts based on the following assumptions:

- A "direct" Keynesian multiplier of 1x.
- A recovery of private investments causing, gradually in six years, their ratio to GDP to attain the average value between 2017 (14.3%) and the 2007 pre-crisis high (17.6%): thus, 15,9% in 2024.

The Keynesian multiplier quantifies the GDP increase caused by expansionary fiscal policies. The 1x hypothesis is conservative, taking into account that the multiplier is usually high for economies rebounding from a depressed status.[2]

In addition, allocating a portion of TCC issuances to reduce the tax wedge on labor has a positive impact on exports and on import substitutions with domestic productions. This is a similar benefit than the one provided by a currency devaluation – actually it is better than the latter, as it does not increase raw material costs. Expanding demand without affecting the external trade balance is then possible, and makes it appropriate to use (for forecast purposes) a "closed economy" Keynesian multiplier.

The project aims at issuing € 30 billion in the starting year and to increase issuances up to € 100 billion in the following two years. Taking into account the two-year delay between TCC issuances and TCC uses for tax rebates, uses will remain lower than issuances up to the fourth year – which speeds up debt reduction:

Year	2018	2019	2020	2021	2022 onwards
Issuances	30	65	100	100	100
Uses	0	0	30	65	100

[2] See "Growth Forecast Errors and Fiscal Multipliers, Olivier Blanchard / Daniel Leigh, IMF Working Paper, 2013" - https://www.imf.org/external/pubs/ft/wp/2013/wp1301.pdf, who found a Keynesian multiplier meaningfully higher than 1x in the first post-crisis years for a large sample of countries. See also chapter 2, e-book *Per una nuova moneta fiscale: uscire dall'austerità senza spaccare l'euro*, B. Bossone, M. Cattaneo, E. Grazzini e S. Sylos Labini (Micromega, June 2015).

YEAR	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026

MINISTRY OF ECONOMY – INERTIAL FORECAST										**€ billion**
GDP	1.717	1.765	1.822	1.877	1.928	1.981	2.035	2.090	2.147	2.205
Real Growth	1,5%	1,5%	1,4%	1,3%	1,2%	1,2%	1,2%	1,2%	1,2%	1,2%
GDP Deflator	0,6%	1,3%	1,8%	1,7%	1,5%	1,5%	1,5%	1,5%	1,5%	1,5%
Nominal Growth	2,1%	2,8%	3,2%	3,0%	2,7%	2,7%	2,7%	2,7%	2,7%	2,7%
Public Deficit	-39	-28	-15		4	4	4	4	4	4
Public Deficit / GDP	-2,3%	-1,6%	-0,8%		0,2%	0,2%	0,2%	0,2%	0,2%	0,2%
Public Debt increase from other causes		18	8	9	15					
Public Debt	2.263	2.309	2.332	2.341	2.352	2.348	2.344	2.340	2.335	2.331
Public Debt / GDP	131,8%	130,8%	128,0%	124,7%	122,0%	118,5%	115,2%	112,0%	108,8%	105,7%

TCC ISSUANCES AND OTHER EXPANSIONARY EFFECTS									
TCC Issuances	30	65	100	100	100	100	100	100	100
Increase in Issuances	30	35	35						
Higher Private Investments	5	17	29	38	46	55	64	66	68
Further Expansionary Actions (FEA)				5	10	15	20	25	30
Increase in FEA	5	12	13	13	13	14	14	7	7
Total Increase in Expansionary Actions	35	47	48	13	13	14	14	7	7
Base Keynesian Multiplier	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00
Higher Inertial Growth		0	1	2	2	2	2	2	3
Impact on Real GDP	35	47	49	15	15	16	16	9	10
Higher Real GDP	35	82	131	147	164	181	200	211	223
NB as expansionary actions include a reduction in the tax wedge on labor as necessary to avoid trade unbalances, it is appropriate to use a “closed economy” Keynesian multiplier.									

2007	2017	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
PUBLIC INVESTMENTS – 2016 CONSTANT EURO 2016 - % ON GDP											
73	46	48	Increase already included in effects from TCC issuances, as TCC are partially allocated to increase public investments								
4,0%	2,7%	2,8%									
PRIVATE INVESTMENTS – 2016 CONSTANT EURO - % ON GDP – WITHOUT TCC											
316	238	238	241	245	248	251	254	257	260	263	266
17,4%	13,9%	13,9%	13,9%	13,9%	13,9%	13,9%	13,9%	13,9%	13,9%	13,9%	13,9%
PRIVATE INVESTIMENTS – 2016 CONSTANT EURO - % ON GDP - WITH CCF											
316	238	238	246	261	277	288	300	312	324	329	334
17,4%	13,9%	13,9%	13,9%	14,1%	14,4%	14,7%	15,0%	15,3%	15,6%	15,6%	15,6%
Higher Cumulated Inflation		1,000	1,007	1,009	1,012	1,017	1,022	1,027	1,032	1,038	1,043
Public Expenditure / GDP			48,1%	46,2%	45,8%	47,2%	48,6%	48,4%	48,1%	48,0%	47,9%
Higher Public Expenditure			6	8	11	17	24	30	37	45	52
IMPACT ON INFLATION											
Higher Inflation			0,7%	0,2%	0,3%	0,5%	0,5%	0,5%	0,5%	0,5%	0,5%
Higher Cumulated Inflation			0,7%	0,9%	1,2%	1,7%	2,2%	2,7%	3,2%	3,8%	4,3%
Impact on Nominal GDP			12	16	23	35	47	60	74	89	106

YEAR	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
IMPACT ON GOVERNMENT REVENUES AND ON THE PUBLIC DEFICIT					**€ billion**					
Government Revenues / GDP		47,5%	47,5%	47,5%	47,5%	47,5%	47,5%	47,5%	47,5%	47,5%
Higher Goverment Revenues		23	48	76	90	105	121	138	152	167
TCC Uses				-30	-65	-100	-100	-100	-100	-100
Higher Public Expenses due to higher Inflation		-6	-8	-11	-17	-24	-30	-37	-45	-52
Further Expansionary Actions					-5	-10	-15	-20	-25	-30
Impact on the Public Deficit		17	40	35	3	-28	-24	-19	-18	-16
ISSUANCES, USES AND TCC OUTSTANDING										
TCC Issuances		30	65	100	100	100	100	100	100	100
TCC Uses				-30	-65	-100	-100	-100	-100	-100
TCC outstanding at year-end		30	95	165	200	200	200	200	200	200
TCC outstanding / GDP		1,7%	4,9%	8,1%	9,4%	9,1%	8,7%	8,4%	8,1%	7,8%
FORECAST INCLUDING THE TCC EFFECT										
GDP	1.717	1.813	1.924	2.038	2.118	2.202	2.290	2.380	2.467	2.556
Real Growth	1,5%	3,5%	4,0%	3,8%	1,9%	1,9%	1,9%	1,9%	1,6%	1,6%
GDP Deflator	0,6%	2,0%	2,0%	2,0%	2,0%	2,0%	2,0%	2,0%	2,0%	2,0%
Nominal Growth	2,1%	5,6%	6,1%	5,9%	4,0%	4,0%	4,0%	4,0%	3,6%	3,6%
Public Deficit	-39	-12	26	35	7	-25	-20	-15	-13	-11
Public Deficit / GDP	-2,3%	-0,6%	1,3%	1,7%	0,3%	-1,1%	-0,9%	-0,6%	-0,5%	-0,4%
Public Debt increase from other causes		14	13	19						
Public Debt	2.263	2.288	2.276	2.260	2.253	2.277	2.297	2.313	2.326	2.337
Public Debt / GDP	131,8%	126,2%	118,3%	110,9%	106,3%	103,4%	100,3%	97,2%	94,3%	91,4%

2017 CONSTANT EURO GDP											
2007	**2017**	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**	**2023**	**2024**	**2025**	**2026**
WITHOUT TCC											
1.816	1.716	1.716	1.742	1.766	1.789	1.811	1.832	1.854	1.877	1.899	1.922
100,0	94,5	94,5	95,9	97,3	98,5	99,7	100,9	102,1	103,3	104,6	105,8
WITH TCC											
1.816	1.716	1.716	1.777	1.848	1.919	1.956	1.993	2.031	2.070	2.103	2.136
100,0	94,5	94,5	97,8	101,8	105,7	107,7	109,8	111,9	114,0	115,8	117,6

Increase in Expansionary Actions (*)	30	35	35	5	5	5	5	5	5
Increase in Real GDP	35	47	48	15	16	16	16	11	11
Expansion Effect	1,16	1,34	1,36	3,09	3,16	3,23	3,30	2,11	2,13
Cumulated Increase (*) from 2017	30	65	100	105	110	115	120	125	130
Cumulated Increase in Real GDP	35	82	130	145	161	177	193	204	215
Cumulated Expansion Effect	1,16	1,26	1,30	1,38	1,46	1,54	1,61	1,63	1,65

Public Deficit + TCC Increase	-39	-42	-39	-35	-28	-25	-20	-15	-13	-11
% on GDP	-2,3%	-2,3%	-2,0%	-1,7%	-1,3%	-1,1%	-0,9%	-0,6%	-0,5%	-0,4%

PUBLIC DEBT – WITHOUT TCC										
Public Debt	2.263	2.309	2.332	2.341	2.352	2.348	2.344	2.340	2.335	2.331
% on GDP	131,8%	130,8%	128,0%	124,7%	122,0%	118,5%	115,2%	112,0%	108,8%	105,7%

PUBLIC DEBT – WITH TCC										
Public Debt	2.263	2.288	2.276	2.260	2.253	2.277	2.297	2.313	2.326	2.337
% on GDP	131,8%	126,2%	118,3%	110,9%	106,3%	103,4%	100,3%	97,2%	94,3%	91,4%
Public Debt + TCC	2.263	2.318	2.371	2.425	2.453	2.477	2.497	2.513	2.526	2.537
% on GDP	131,8%	127,9%	123,2%	119,0%	115,8%	112,5%	109,1%	105,6%	102,4%	99,3%