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Rethinking Tourism in Macroeconomics

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Abstract

The contemporary crisis is giving evidence of failures of macroeconomic theory and macroeconomic policies. If the State is e key-role in macroeconomics, the contemporary crisis has shown the 'State Weakness' and any attempt in order to downgrade its role, when concentrated on deleveraging and spending review. Monetary policies seem to fail too and their targets should be changed.

What if primary tools and estimates like GDP are not more able to estimate growth and welfare?

In this paper we discuss the hypothesis that GDP can still be a reliable estimate of growth. Nevertheless only if GDP is connected exports that are leading many countries out of the crisis, when public spending is collapsing and monetary policies do not solve the contemporary credit crunch.

Exports are important, with particular attention to any component that is related to exports. International Tourism Receipts must be included.

According to the World Bank database and thanks to a cluster analysis of International Tourism Receipts and GDP growth from 2007 to 2011, positive variations of GDPs are perfectly matching with positive variations of tourism receipts. The cluster analysis emphasizes differences among 'regions' or continents. Europe and USA are relatively worse than Emerging Economies and this performance can be related to an increase of trade in emerging economies more than in mature ones.

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Angela Besana wrote paragraphs 1, 3 and 4. Anna Maria Bagnasco wrote paragraph 2.

1. Macroeconomics and macroeconomic policy: what is worth?

Which theoretical model and interpretation are today deserving the merit of clearly explaining macroeconomic trends? If *Merit Goods* deserve the national and community support, *Merit Theories* should deserve an international approval and crowding-in of thinking and re-thinking that are useful to further developments and upgrading. Today, Macroeconomic Theories are collapsing in their applied tools and prediction is sometimes unaffordable. ... the concept of economic systems and models covers a vision, a well-defined structure and purpose, together with methods and procedures to achieve economic performance ... (Popa, 2012)

Though efforts can be huge, a trustworthy predictivity is far from being achieved as the structure of economic systems is chaotic more than deterministic.

The latest financial and real crisis (2007) has given evidence that macroeconomics and macroeconomic policies are not always able to predict, estimate, solve cycles of contemporary economic systems.

According to Stiglitz standard models include too much exogenous (Stiglitz, 2011). Standard models treat governments as outside the system: it too is modelled as is it were exogenous.... The inability of the representative agent model to incorporate meaningful information asymmetries and financial constraints is evident.

Two major macroeconomic players are, therefore, misunderstood: the State and the agent. The State should be designed as much more engaged in and impacting on markets. The State is, instead, evoked as for huge debts and spreads. A *Giant and Indebted State* is, as a matter of fact, of no need.

Whoever is this agent, it is not possible to understand his visions, structure and purposes. *Behavioural economics* was a big achievement in the understanding of expected utilities, values and behaviours. This microeconomic approach should be today more than in the past pervasively accepted by macroeconomists (Akerlof, 2002; Hoff and Stiglitz, 2010).

Where is the theoretical network failing? Are there only wrong links or are any nodes breaking down so that links get weaker and weaker and collapse too?

One of the node is the full understanding of demand and supply behaviours. One of the misleading theoretical support is the myth of the never-ending growth of both. Recent and past societies lived of overconsumption and it was the triumph of *fashion effects*. Creativity is not condemnable but we cannot give birth to a long-tail supply (*versioning*) for any kind of goods and any kind of consuming pattern. A lot of industries were born with a very short life cycle and virtual links were nurturing long-tails in order to extend and cope with short life cycles. The growth of neither primary nor secondary needs and the growth of post-industrialism generated externalities which were more negative than positive. Neither the overconsumption was ecological nor the reply of the manufacturing industry. The ecology should refer both to the sustainability of the supply-chains, to consumptions and to their environmental impact.

The node of the market and the never-ending growth *was nurtured* by the links of fashion and virtual industries. The internet society was revealing itself as a bulimia of information flows and inspiring new needs. The social capital was perhaps positively affected but the physical capital of some natural resources was exhausted.

As already mentioned, another theoretical node, which was exaggerated, was the role of the State. The *Giant State* is not necessary to an economy who is exhausting resources, especially when the Giant State is an accelerator of this exhaustion. The list of eligible sectors where the State has got a primary role should be also revised. Are we at all sure that the State should not be excluded of the provision of some public goods? Arbitrage is nowadays perhaps working better than courts. Neither mercenary soldiers nor a huge public military spending are useful. Public hospitals often survive thanks to multiple transactions that accelerate the growth of the public expenditure. It can be concluded that some nodes and links are abused and extra-nurtured.

On the supply side, GDPs are internationally diminishing. Only some economies are growing at different latitudes. China, Turkey, Poland, Mexico, Brazil are growing though the growth is today continually estimated at lower rates than at the expected ones in 2008 and 2009. On the demand side, consumptions are generally collapsing, though some export and import flows let some specific industries profit by counter-trends, from telecommunication to chemistry, from natural resources to refuge goods (gold and other mining industries).

Macroeconomic policies do not give evidence of any kind of reverse-cyclical impacts. Macroeconomic policies are, instead, failing and national demands are enough weak to fail, as a consequence. Both the fiscal policy and the monetary policy are strenuously achieving minor goals than in the past and they are both to be revised and targeted, perhaps, to new goals.

Fiscal policy can be an automatic *destabilizer* (Case, Fair, Oster, 2012). When there is no possibility of *reinventing* the public expenditure as this one has been exceeding for decades, the State has inferior roles than in the famous post-1929. Above all, if there is a negative demand shock, if both tax rates are raised and the spending cuts are increased in order to reach the deficit target, a second demand shock will occur, it will reinforce the first shock and will worsen the contraction.

Inflation is not excluded from this negative scenario. Most public services and commercial transactions are, above all, burdened by increasing taxes on the so-called added values so that, though the demand is collapsing, deflation is not matching this negative trends. Inflation is affecting daily individual expenditures and if consumers are at most cautious, banks deny any lending propensity so that the credit crunch is worsening and worsening.

Monetary policy is not of useful help too. Monetary policy should change targets. Inflation is no longer seen by all as the main target of monetary policy. Stabilising nominal GDP growth would be better. The independence of Banks should be, as a consequence, rewritten. The decision over whether central banks should target inflation or nominal GDP should be made by politicians, not central banks, alone. Banks should also revise their strong aptitude to credit crunch.

The crisis originated in the US private sectors and it got pervasive with the emersion of hugely indebted both US and European States who are now concentrated on deleveraging.

Markets are definitely not fully rational but States are not at all rational too.

The myth of clearing prices is vanishing while the economics of barter, cooperation and philanthropy are growing.

Today, apart of banks, there are States who are *too big to fail* after ages of a huge spending and connecting with other States and economies thanks to Bills whose spread is soaring. When States are concentrated on deleveraging, Private Welfare States become essential in order to exploit community-based needs on the principles of *cooperative and philanthropist spirits*.

The aim of this paper is to give evidence that with collapsing States and macroeconomic policies, the openness is the best reply to the crisis. Especially, tourism can be positively connected to GDPs, whose debated reliability in order to estimate growth and welfare is compensated by other measures like International Tourism Receipts.

2. Measuring Growth: what is worth?

The debate on the need to broaden the horizon of current measures of economic performance, in particular those solely based on Gross Domestic Product (GDP), has been underway for a long time and has recently aroused a wide range of reflections.

Much emphasis is usually put on GDP: even if it is a good measure of economic growth, this measurement is not able to capture some phenomena, which have an increasing impact on the well-being of citizens. So there are activities that generate wealth but not well-being and activities that generate well-being but not wealth: GDP is suitable to record only those that generate wealth without considering every other effects, positive or negative. So it has long been clear that GDP is an inadequate metric to gauge well-being over time.

Even if GDP is a crucial measurement of growth, it is not all-encompassing. In fact there is no a single dimension of well-being while well-being is multi-dimensional: besides economic resources the current well-being has to do with non economic resources, with particular attention to the environmental and social ones. GDP is not suitable to grasp the aspects related to the progress and well-being of the people: for example it does not take into account those assets that do not have a market, does not consider negative externalities - ie the costs related to production activities (pollution, unsustainable exploitation of resources, etc..), the quality of public spending, etc. ..

As Fitoussi, Sen and Stiglitz (2009) have effectively reminded in the final report of the Commission on the Measurement of Economic Performance and Social Progress 'What we measure affects what we do.' There is a strong demand in the direction to develop the most appropriate indices to measure progress and well-being of nations. Another aim is to understand how they can be better integrated in the processes of formulating economic and social policies and adequately taken into account in public debate on key strategic issues. Defining and measuring human well-being in a way that is as much as possible inclusive, shared and adhering to its complexity of reality does not represent simply a fascinating challenge for social scientists, but a fundamental step towards the definition of best practices of political and economic choice.

Hence the need to develop additional indicators able to enlarge the measurement range to other dimensions of well-being that go beyond only the economic dimension of this aspect

A wide variety of indicators are already available but a comprehensive assessment of sustainability is difficult to establish in a fully consensual way. (Fitoussi et al., 2009).

So organizations and scientist are working to develop innovative measurement of well-being, taking into account its different aspects: economic, environmental, social, etc..

In summary, there is no single definition of well-being, but rather a set of possible aspects that combine to define in a comprehensive manner the meaning. A detailed list of possible factors that can affect a dimension of individual well-being is necessarily incomplete.

The complexity of the phenomenon is such that, in the strict sense, it does not appear possible today to reach an actual and definitive measurement.

However new works on the theme can contribute to enrich its approximate calculation. In this paper we investigate how performances of macro-economies can be estimated thanks to a cluster analysis of GDPs and International Tourism Receipts, data that can be more reliable than GDPs to verify growth at contemporary times.

3. Tourism Growth and Cluster Analysis

Tourism can lead the growth of a country, especially, when any other aggregate expense is rather absent and any macroeconomic policy is not able to stimulate the aggregate expense. Especially, the international tourism can have a positive effect on economic growth as it increases employment opportunities, personal incomes, taxes, revenues and investment (Brau, Lanza and Pigliaru, 2007; Lee and Chang, 2008), foreign exchange earnings and, as a consequence, the balance of payment. Tourism stimulates investments in new infrastructures (Sakai, 2009), human capital (Blake et al, 2006) and technology (Feng and Morrison 2007; Lemmetyinen and Go, 2009). Furthermore, tourism stimulates other related industries by direct, indirect and induced effects (Spurr, 2009) and causes positive economies to scale and scope (Weng and Wang, 2004). Any tourist can appreciate hotels, transport systems, gastronomy, etc when he is 'experiencing the holiday'. Once the tourist is back in the home-country, he can 'extend the experiences and shopping' and, as a consequence, he may import more many goods from abroad (Pinna, 2011). Tourism can increase exports after the touristic experience, too.

The World Bank usually collect the national accounting of International Tourism Receipts (ITRs). International tourism receipts are expenditures by international inbound visitors, including payments to national

carriers for international transport. These receipts include any other prepayment made for goods or services received in the destination country. They also may include receipts from same-day visitors, except when these are important enough to justify separate classification. For some countries they do not include receipts for passenger transport items. Data are in current U.S. dollars.

Thanks to a k-means cluster analysis of annual variations ITRs (International Tourism Receipts) and GDPs (Gross Domestic Product in current U.S. dollars) during the crisis, from 2007 to 2011, three main clusters were found for a sample of 150 countries. The positive correlation of ITRs growth and GDPs growth was evident from 2009, with different performances for European Economies and USA, who were mostly damaged by the crisis in comparison with countries like Brazil, China, India or South Africa, who showed better performances.

Cluster, Number of items in each cluster 1,1 2, 1 3, 1 4,82 5,46 6,16 7,3 International Tourism Receipts Variation 2008-2007 .00 1,18 ,21 ,13 ,06 .24 1,29 33,29 1,04 -,22 -,10 -,06 International Tourism Receipts Variation 2009-2008 ,17 -,12 International Tourism Receipts Variation 2010-2009 -,55 -,58 -,90 -,01 ,23 ,15 ,21 ,50 International Tourism Receipts Variation 2011-2010 ,07 ,04 18,33 ,11 ,09 -,12 GDP Variation 2008-2007 ,17 ,09 ,15 ,13 ,32 ,25 ,17 GDP Variation 2009-2008 -.04 .02 .36 -.08 .00 -.05 -.09 GDP Variation 2010-2009 ,17 ,03 ,05 ,18 ,24 ,12 ,12

Table 1. Average performances of 150 Economies during the crisis 2007-2011. Final Cluster Centers for annual variations of International Tourism Receipts and GDPs

Source: elaboration with SPSS Software

GDP Variation 2011-2010

Most European Economies with United States and other seriously (by the crisis) injured economies are in the cluster 4 (54.66% of the whole sample). As in 2009 International Tourism Receipts (ITRs) diminished of -10%, the GDP also collapsed of -8%. In 2010 and 2011 variations of ITRs increased from -1% to 11%, so GDPs profited by an increase of 5% in 2010 and 10% in 2011.

,19

.07

,19

,10

,15

.19

,06

In the cluster 5 (30.66% of the whole sample) we can find Brazil, China, India, South Africa and other fastergrowing economies than the ones in the cluster 4. In 2010 ITRs grew +23% and GDPs grew +18% on average. In 2011 the growth was slower. In any case ITRs increased +9% and GDPs +15%.

In the cluster 6 (10.66% of the whole sample) some economies with extra-ordinary performances can be found. Nevertheless it can be discussed if ITRs include only tourism flows or also cooperation flows, if it is considered that this cluster includes most of African countries.

	Cluster	•	Erro	r	_	
	Mean	df	Mean	df	F	Sig.
	Square		Square			
International Tourism Receipts Variation 2008-2007	,923	6	,030	143	30,304	,000,
International Tourism Receipts Variation 2009-2008	184,398	6	,029	143	6299,724	,000,
International Tourism Receipts Variation 2010-2009	,613	6	,021	143	29,158	,000
International Tourism Receipts Variation 2011-2010	55,233	6	,035	143	1598,613	,000
GDP Variation 2008-2007	,081	6	,010	143	7,832	,000
GDP Variation 2009-2008	,059	6	,010	143	5,838	,000
GDP Variation 2010-2009	,091	6	,009	143	10,365	,000,
GDP Variation 2011-2010	,025	6	,007	143	3,843	,001

Table 2. ANOVA - Analysis of Variance

(Table 2) The analysis of variance (ANOVA) is significant for all variations that are listed in Table 1.

During the crisis when macroeconomics policies are not able to cause a shock of the domestic expense or demand, when the public expenditure is to be drastically limited after decades of increasing debts, when consumption and investments are depressed by the fiscal burden and when quantitative-easing is not able to solve the credit crunch, exports can be a solution. International Tourists' incoming generates cash-flows during the holiday, the business trip or any other experience of 'the foreign land'. Next to this primary expense of the tourist when he is abroad, there is a secondary expense of shopping after the experience abroad.

It was here investigated the primary expense of International Tourism Receipts and it was given evidence that positive variations of GDPs are perfectly matching with positive variations of ITRs. The cluster analysis emphasized differences among 'regions' or continents. Europe and USA are relatively worse than Emerging Economies and this performance can be related to an increase of trade in emerging economies more than mature ones. These ones are looking at emerging economies as commercial partners and, as a consequence, most of business trips are targeting emerging economies, in order to reach wealthy consumers and in order to partnership with wealthy investors.

4. Conclusions

Macroeconomics and macroeconomic policies are not solving failures of the contemporary crisis. At the same time, measures like GDPs are showing their methodological weakness in order to estimate growth and well-being.

The cluster analysis of the World Bank database for a sample of 150 countries that were investigated both for the GDPs and ITRs till 2011, confirms that increasing of ITRs is matching with increasing GDPs. Nevertheless, there are differences between mature and emerging economies in the speed of this parallel growth.

One limitation of this investigation is the definition of International Tourism Receipt. First of all, it can be discussed if this includes only tourism or cooperation flows, businesses that are not tourism-targeted, etc. Secondly, ITR is the primary expense of the tourist abroad but it is still to be examined what is the secondary expense, after the journey. And it is difficult to separate this kind of expense of imports of a country.

After months of quantitative easing, USA monetary policy is now turning to tapering. If this trend can be

evidence of the exit of the crisis, it would be interesting to investigate further if monetary policies are much more than positive foreign flows accelerating mature economies out of the crisis.

Some data of China and Brazil economies are lately contradicting the accelerated growth of five years ago. It should be further investigated if the isolation 'out of the world trade' could have much more heavily depressed this slowing growth.

In conclusion tourism is positively affecting the exit out of the crisis. It cannot be forgotten that tourism can also damage economies: from pollution to the opportunity-costs of industries (especially, the manufacturing ones) that are abandoned in order to invest in tourism.

At these hard times and when considering the failure of macroeconomic policies, rethinking the role of tourism in macroeconomics is a binding commitment. This research is an attempt to show the added value of this macroeconomic 'stabilizer'.

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Appendix A - Clusters

Congo, Dem. Rep.	1
Guinea	2
Liberia	3
Albania	4
Antigua and Barbuda	4
Austria	4
Belgium	4
Benin	4
Bulgaria	4
Bahamas, The	4

Sweden	4
Seychelles	4
Tunisia	4
Turkey	4
Tanzania	4
Ukraine	4
United States	4
St. Vincent and the Grenadines	4
Venezuela, RB	4
Samoa	4

Bosnia and Herzegovina4Belize4Switzerland4Chile4Cape Verde4Cuba4Cyprus4Czech Republic4Germany4Dominica4Dominica4Spain4Spain4Finland4Finland4Greece4Grenada4Honduras4Inited Kingdom4Greada4Haiti4Haiti4Karaa4Korea, Rep.4Kuwait4Kuwait4Kuwait4		
Switzerland4Chile4Chile4Cape Verde4Cuba4Cyprus4Czech Republic4Germany4Dominica4Dominica4Dominica4Spain4Spain4Finland4Finland4Grence4Greace4Greace4Greace4Honduras4Haiti4Italy4Italy4St. Kitts and Nevis4Korea, Rep.4	Bosnia and Herzegovina	4
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Honduras4Croatia4Haiti4Hungary4Ireland4Iceland4Italy4Jamaica4Cambodia4St. Kitts and Nevis4Korea, Rep.4	Greece	4
Croatia4Haiti4Hungary4Ireland4Iceland4Italy4Jamaica4Cambodia4St. Kitts and Nevis4Korea, Rep.4	Grenada	4
Haiti4Hungary4Ireland4Iceland4Iceland4Italy4Jamaica4Cambodia4St. Kitts and Nevis4Korea, Rep.4	Honduras	4
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Bangladesh	5
Bahrain	5
Bermuda	5
Brazil	5
Bhutan	5
Canada	5
China	5
Colombia	5
Costa Rica	5
Ecuador	5
Egypt, Arab Rep.	5
Guatemala	5
Hong Kong SAR, China	5
Indonesia	5
India	5
Israel	5
Jordan	5
Japan	5
Kazakhstan	5
Kenya	5
Lao PDR	5
Lebanon	5
Sri Lanka	5
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Panama	5
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