

Contents lists available at ScienceDirect

Ecological Economics

journal homepage: www.elsevier.com/locate/ecolecon



Potential Consequences on the Economy of Low or No Growth - Short and Long Term Perspectives



J. Mikael Malmaeus ^{a,*}, Eva C. Alfredsson ^b

- ^a IVL Swedish Environmental Research Institute, P.O. Box 210 60, SE-100 31 Stockholm, Sweden
- ^b KTH, Royal Institute of Technology, Environmental Strategies Research (FMS), Drottning Kristinas väg 30, SE-100 44 Stockholm, Sweden

ARTICLE INFO

Article history: Received 13 January 2016 Received in revised form 26 September 2016 Accepted 12 December 2016 Available online 19 January 2017

1. Introduction

1.1. Background, Aim & Scope

Since the 1950s economic growth has been an official policy objective in most western countries. In general, growth rates have been significantly slower since the 1970s than during the two previous decades. And after the financial crisis in 2008 economic growth has, in most countries, not yet recovered. An increasing number of economists and commentators are now challenging the (still dominant) assumption that GDP growth will continue to grow at a "normal" rate of 2.5% in the coming century (Alfredsson and Malmaeus, in press). A "new normal" annual growth rate at 1% or lower is proposed by mainstream economists (e.g. Gordon, 2012; Grantham, 2012; Piketty, 2014) primarily due to a lower expected pace of technological development and hence lower growth-pace of productivity. Outside the mainstream, zero-growth or even catastrophic developments are considered due to a decline in oil production (Ayres and Warr, 2009; Kumhof and Muir, 2012), other resource constraints and negative effects from environmental deterioration and climate change (Turner, 2008; NCE, 2014).

While the positive effects of economic growth in terms of, e.g., labor employment and improving public finances are well known, negative effects of continued economic growth on the economy may seem like a contradiction but is increasingly being recognized (Victor, 2013). Various authors have argued that economic growth in many rich countries have gone from being economic to uneconomic, i.e. that current economic growth cause more negative effects than positive effects (e.g. Daly, 1996; Bartolini and Bonatti, 2008; Victor, 2013). A transition to lower (sustainable) growth rates will however, as suggested by the subtitle of a book by ecological economist Peter Victor (2008), "Slower

* Corresponding author.

E-mail address: mikael.malmaeus@ivl.se (J. Mikael Malmaeus).

by Design, Not Disaster", require management. Several authors emphasize the need to address the various implications of reduced growth (e.g., Jackson, 2009; Martínez-Alier et al., 2010).

There is hence a need to better understand the potential effects of low or no economic growth addressing social, economic and political consequences of such a development. In this paper we are concerned with the economic consequences and primarily aim to explore potential consequences of an unmanaged transition to a new normal, i.e., long-term lower growth levels on a global scale. The focus is on exploring effects rather than the reasons behind lower future growth rates, and we will examine a wide range of possible effects in order to get an overview and provide a starting point for further research.

We define economic growth in conventional terms as rate of increase in real GDP which, by definition, is a monetary measure of economic activity rather than a measure of physical throughput. As economic consequences we consider effects on conventional parameters reflecting the functioning of firms, labor markets, capital markets, financial markets and governments as well as productivity, income levels, levels of public and private consumption and income distribution between households. The wider societal effects of changing patterns of production and consumption are beyond the scope of this paper.

GDP growth means that aggregate output increases, but regardless of the aggregate growth rate there may always be businesses growing alongside others that shrink. This also comprises economic transformations or creative destruction to use a Schumpeterian term. We will encounter this issue further along but initially we would like to clarify that creative destruction can occur also in a low-growth or even a shrinking economy, although the term is usually associated with the process of growth.¹

1.2. Methodology

In this paper we survey empirical and theoretical evidence found in the scientific literature. As there are no real empirical data on effects of a long-term transition from high to low economic growth on a global level the indications used are drawn from recessions or depressions typically played out within the timescale of a business cycle covering single or groups of countries. It is however likely that the economic

 $^{^{1}\,}$ In an environmental context, replacing fossil energy with renewable alternatives may be one example of such a transition which is feasible within the constraints of a non-growing macro economy.

Table 1Averages of performance indicators for a number of OECD countries during periods of low and normal GDP growth. Data from stats.oecd.org.

	Denmark		Japan		Mexico	
	1997–2001	2008-2012	1987-1991	1997–2001	1982-1986	1990-1994
GDP growth ^a	2.4	-0.7	5.4	0.1	-0.4	3.6
Unemployment ^b	4.8	6.4	2.4	4.4		3.1
Government debt ^c	60.2	36.6	49.4	98.2	37.8	31.6
Inflation ^a	2.4	2.4	1.9	0.1	74.0	16.3
Gini coefficient ^d	0.23	0.25		0.34	0.45	0.52
Poverty ^e	0.23	0.24		0.24		
	New Zealand		Spain		Sweden	
	1975–1979	1982-1986	1997-2001	2008-2012	1990-1993	2001–2005
GDP growth ^a	-0.1	3.1	4.5	-1.0	-0.9	2.6
Unemployment ^b	0.9	4.6	15.9	19.1	5.1	6.1
Government debt ^c			51.5	43.8	52.3	47.2
Inflation ^a	14.3	11.7	2.6	1.9	6.7	1.5
Gini coefficient ^d		0.27		0.33	0.21	0.23
Poverty ^e		0.20		0.33	0.26	0.27

- ^a Measured as % per year.
- b Measured as % of civilian labor force.
- ^c Total central government debt as % of GDP.
- Gini coefficient at disposable incomes, post taxes and transfers. The Gini coefficient measures income inequality; 0 = perfect equality and 1 = maximum inequality.
- ^e Poverty rate before taxes and transfers; poverty line 50% below median income.

characteristics of such short-term episodes may be quite different from consequences of long-term reductions of the growth rate. The synthesis and conclusions are thus drawn bearing this in mind.

We begin with a review of studies by conventional (including neoclassical) economists regarding economic depressions. By "conventional" economics we do not refer to any coherent body of research, but we define it loosely in relation to heterodox economic perspectives which are usually not found in standard economic journals. We find it convenient to summarize these perspectives together, since they differ significantly in scope and results from the alternative perspectives discussed subsequently. In relation to growth the focus of conventional economists is primarily on how it can be promoted. By contrast, the growth agenda is often questioned by alternative economists. In the heterodox literature more theoretical reasoning and models about possible consequences of low or no economic growth can be found.

In Section 2 we provide a review of how low or no economic growth is perceived from different theoretical perspectives, aiming to provide a contextual understanding of the subject. Such an understanding is important since the results often depend on the point of view and therefore we make no judgment of their reliability at this stage. In Section 3, on the other hand, we present a synthesis of perspectives and thematically discuss different economic consequences based on the findings in Section 2, complemented with some additional sources.

2. A Review of Studies

2.1. Conventional Studies of Economic Depressions

If the subject of low GDP growth is viewed through the lens of conventional economics, the term depression is usually defined as a period of unusually low GDP growth. The depressing facts are the typical symptoms of such a period as registered in various economic parameters, including low engagement of the labor force and low capacity utilization of fixed capital – resulting in unemployment, loss of profits, falling investments and rising government debt. But if we compare periods with low or negative GDP growth with periods of normal or high growth in a number of countries we also find cases where the numbers do not match the normal pattern (Table 1). Sweden and New Zealand for example had lower levels of unemployment during low growth periods, and Denmark and Spain reduced their government debts.

Some changes may reflect global trends rather than national growth levels. Inflation for example decreased with time in all countries regardless of growth level while Gini coefficients increased. We do not infer that growth is unrelated to these performance indicators but that there are few simple lessons to learn from the data. There are trends within the periods as well (not shown) which in some cases support the assumption that high growth rates have a positive influence on economic performance indicators and sometimes not. More commonplace is however to have a correlation between low growth, increasing unemployment and increasing government debt.

The association of growth with good economic performance can be traced back to Keynes (1936) and the depression economics of the 1930s. Subsequent work by Harrod (1939) and Domar (1946) treated growth as a remedy for unemployment. The general problem during an economic slump is short run aggregate demand falling below the economy's long-term productive capacity (Krugman, 1999). The core of Keynesian economics is to ensure short run growth simply in order to avoid economic depressions. Notably, Keynes himself was not convinced that long run growth of the productive capacity would be the normal for future generations (Keynes, 1930).

In a series of studies (Kehoe and Prescott, 2002; Conesa et al., 2007; Gogos et al., 2014) economic depressions have been studied using neoclassical general equilibrium growth models. According to Kehoe and Prescott (2002), if output growth is significantly below trend² the economy is in a depression. In these models depressions are usually explained by changes in total factor productivity and worked hours in the economy. The focus of these studies is thus to explain the factors behind low growth rates and these factors are themselves at best illustrative of the characteristics of depressions. Low participation of the work force and other factors are thus seen as causes rather than consequences of low growth rates in these models.

Reinhart and Rogoff (2010) examine a large number of financial crises during the latest 800 years, including numerous defaulting states and bank failures. There are different types of crises such as inflation crises, currency crashes, asset price bubbles, banking crises and external debt crises but a typical duration of all sorts of crises is 4–7 years. Financial troubles often occur in concert with slowing growth rates, especially

 $^{^{2}\,}$ Defined as the average annual real per capita GDP growth rate of the industrial leader of the world economy.

Download English Version:

https://daneshyari.com/en/article/5048674

Download Persian Version:

https://daneshyari.com/article/5048674

<u>Daneshyari.com</u>