

Policy Paper Series „Growth in Transition“

INTERACTIONS BETWEEN GROWTH (IN TRANSITION)
AND THE SOCIALLY RELEVANT TOPICS: LIFE QUALITY,
PUBLIC SPENDING, WORK, MICRO- AND MACROECONOMIC
RESILIENCE, AGRICULTURE, SUSTAINABLE LEADERSHIP
AND DISTRIBUTION

Results of the Policy-Science Stakeholder Dialogue 2011- 2013
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Based on the Contributions of the Respective Authors of the Policy Papers
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*Discourses on
Growth,
Prosperity and
Quality of Life*

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1 “Growth in Transition”

1.1 Background

The initiative „Growth in Transition“ is based on the observation that the promotion of economic growth was, and still is, the preferred policy response to challenges such as unemployment and poverty. However, it becomes clear that the current growth path continually comes into conflict with the principles of sustainable development.

The authors of the Policy Papers assume that it will not be possible to substantially stimulate growth in the coming years. In the field of sustainability research, there is a growing agreement that the previous growth patterns are incompatible with sustainable development (see, for example, Victor, 2008; Jackson, 2009). Neither have these patterns created full employment, well-being and a fairer distribution of resources (Adger, 2006), nor did they induce a reduction in resource use (Dittrich et al., 2012) or in the environmental impact (Millennium Ecosystem Assessment, 2005; Rockström et al., 2009).

On the contrary, it is noticeable that not everything, which has grown in the past or still grows, contributes to the improvement of citizens' prosperity or quality of life, or enables individuals to live a good life. Besides positive social and ecological effects, the growth path of industrialized countries like Austria was and still is associated with ecological costs that should not be ignored. Therefore, it is necessary to redefine prosperity in terms of sustainable development.

1.2 Policy-Science Stakeholder Dialogue

Within the framework of the Policy-Science Stakeholder Dialogues, the initiative „Growth in Transition“ focuses on the question how Austria’s economic system can be permanently stabilized, against the background of global change (e.g., resource scarcity, climate change, demographic change, etc.). In this context, the long-term vision is a resistant economy and society that is oriented towards the common good/public welfare.

Since about two years, specific topics that are relevant in the context of economic growth are explored in depth in the course of these dialogues. Addressing the issue “Growth and ...”, more than 120 experts and stakeholders have discussed the topics of “Work”, “Distribution”, “Public Spending”, “Life Quality”, “Resilience”, “Leadership”, “Energy” and “Eco-system Services” throughout a series of workshops.

Based on the knowledge generated in the course of the workshops, several “Policy Papers” have been produced, thereby trying to combine results from the literature with inputs obtained during the discussions as best as possible. Furthermore, an attempt has been made to create an incentive for further, more profound inquiries with the respective topic. In part, also written comments provided by experts or results from other Policy Papers have been considered.

Under the assumption that it is not possible to permanently sustain the high grow rates of the past, the different Policy Papers do not only deal with the challenges and questions arising from the topics analyzed, but they also discuss concrete starting points and recommendations. The Policy Papers can neither be seen as scientific articles, nor as consensus documents of the participating actors. Based on the results of the stakeholder dialogues, the objective of the Policy Papers is rather to illustrate the challenges and possible solutions that seem especially relevant for a sustainable economic system.

This synthesis report summarizes the results of the Policy Papers that have already been finished. The following table provides an overview over the currently available Policy Papers, including the respective clients.

Title of Policy Paper (short and long titles)	Clients
<u>Policy Paper 1:</u> Growth and Life Quality – How growth and consumption in transition can increase life quality	REWE and Bertelsmann Stiftung
<u>Policy Paper 2:</u> Growth and Public Spending – Which scope does public expenditure have under the conditions of uncertain growth forecasts, and how can public spending contribute to a more sustainable economy and society?	Austrian Federal Ministry of Agriculture, Forestry, Environment and Water Management
<u>Policy Paper 3:</u> Growth and Work_– Which scope does employment policy have in the light of unsecure growth forecasts, and how can employment policy contribute to a more sustainable economy and society?	Austrian Federal Ministry of Agriculture, Forestry, Environment and Water Management
<u>Policy Paper 4:</u> Growth and Agriculture –What is the role of agriculture as provider and user of ecosystem services in a situation of “Growth in Transition”?	Bio Austria, Landwirtschaftskammer (Chamber of Agriculture), Wirtschaftskammer Österreich (Austrian Chamber of Commerce), Hofer
<u>Policy Paper 5:</u> Growth and Macroeconomic Resilience – Resilience in the global/Austrian economy with less, stagnant or different growth	Oesterreichische Nationalbank (Austrian National Bank)
<u>Policy Paper 6:</u> Growth and Resilience at the Corporate Level – Which structural conditions are needed in order to enable firms to face possible future crises and economic slowdowns in a sustainable way?	Wissenschaftsministerium und Wirtschaftskammer Österreich (Ministry of Science and Austrian Chamber of Commerce)
<u>Policy Paper 7:</u> Growth and Leadership – Sustainable Leadership: Which contributions can the economy provide to promote sustainable growth?	B.A.U.M Austrian Network for Sustainable Management
<u>Policy Paper 8:</u> Growth and Energy – Sustainable energy system – a chance for Austria	VERBUND und Raiffeisen Klimaschutz-Initiative
<u>Policy Paper 9:</u> Growth and Distribution	Arbeiterkammer Wien (Austrian Chamber of Labor Vienna)

The Policy Papers 1 to 6, as well as the issues 8 and 9, have been developed under the supervision of SERI. The Policy Paper 7 has been generated by B.A.U.M. Austrian Network for Sustainable Management.

We would like to thank the clients and all the experts involved for their valuable inputs and comments.

The Policy-Science Stakeholder Dialogue on the topic of „Growth in Transition“, however, is not yet finished. The intention is to evaluate further topics in the course of such a process (such as pension policies, waste management, development cooperation, innovation & technology, etc.), in order to comprehensively analyze the interactions between a modified notion of growth and important policy agendas in the next years.

1.3 Focus and objective of this paper

The objective of this synthesis report is to summarize the Policy Papers that are currently available. More specifically, the following topics are discussed:

- Life quality
- Public spending
- Employment/Work
- Macroeconomic resilience
- Resilience at the corporate level
- Agriculture as provider and user of ecosystem services
- Sustainable Leadership
- Energy
- Distribution

We devote about three to four pages to each topic and briefly describe the results achieved. For a detailed discussion, we refer to the particular full reports that can be downloaded here (German version): <http://wachstumimwandel.at/policy-papers/>

Although the structure of the respective Policy Papers may differ due to various reasons (e.g., requests of clients, feedback of experts involved), attempts were made to structure the reports as similar as possible. All papers contain results from the discussions about the interactions between economic growth and the respective topic. The discussions were guided by the following questions:

- What are the effects of the particular topic on economic growth?
- How does economic growth affect the topic in question, and which challenges result from low/stagnant or negative growth rates?

Based on these questions, the key issue is how to design sustainable policies under changed conditions of growth.

The topics discussed are more or less interrelated and cannot easily be separated from each other. Nevertheless, we follow the approach of presenting the topics and their interactions with economic growth separately from each other. It is thus possible to decrease complexity to some extent and to gain a better understanding for individual effects.

2 Growth and Quality of Life

Under the assumption of low economic growth rates, it is expected that individually available incomes will be lower in the future. Reasons for this are, on the one hand, a reduction of wages (triggered either by a decrease in production or by lower company profits), and on the other hand, an increase of prices (e.g., caused by the scarcity of resources). Lower incomes, in turn, restrict consumption possibilities. Against this background, we examine how these changed circumstances affect life quality and which measures and strategies are appropriate to avoid possible negative impacts.

2.1 Is economic growth necessary for a high quality of life?

As a matter of fact, a high quality of life requires a certain amount of material resources to fulfill basic needs. Life quality is not influenced directly by economic growth, but indirectly by consumption, which allows the satisfaction of needs. According to some happiness researchers and economists, economic growth does not necessarily increase life quality (e.g., Easterlin et al., 2010). Although material goods are essential for meeting basic needs, an increase in material consumption does not only result in negative ecological consequences, but may also induce a reduction in life quality. The latter can manifest itself, for example, in lacking time for family, friends, leisure or hobbies. Other possible consequences are different forms of addictions or a treadmill of ever increasing wants and comparisons with others. Numerous needs can only be satisfied insufficiently by material strategies. Therefore, immaterial sources of prosperity, which have a positive impact on life quality, but are not dependent on economic growth, are increasingly required. The call for a change in consumption patterns especially applies to early industrialized countries with an already high level of material wealth.

2.2 Does a change in life quality inhibit or foster economic growth?

New sustainable lifestyles go beyond the paradigm of „more is better“ or „stinginess is sexy“. Besides the consumption of material things, values such as self-realization und participation become more important. New alternative lifestyles are characterized by immaterial consumption and sufficiency. These lifestyles pay particular attention to ethical framework conditions and the implications products and services have. One could argue that the consumption of new lifestyle groups is of **higher quality**: First, in the sense that new values, ideas and world views play an increasingly important role for consumption. Second, according to the motto “better instead of cheap”, new lifestyle groups place an emphasis on high-quality and sustainable goods that can be used for the long term. These forms of immaterial lifestyle are able to increase life quality, are less dependent on economic growth and able to reduce GDP due to lower consumption. The resulting reduction in income, however, does not induce a lower level of life quality as the latter no longer depends mainly on material sources.

2.3 Status quo

We are living in times of change and transition. Because of the complexity and acceleration of crisis situations and the lack of practical alternatives, many people feel disoriented and powerless. The economic system, which has been successful in the past, may soon be constrained by environmental limits. The same holds for lifestyles, which are strongly oriented towards consumption. Furthermore, it may be doubted whether more growth necessarily increases life quality, an equation previously considered as valid. In fact, economic growth often has negative consequences, such as environmental pollution and negative social implications (stress, work overload, unequal distribution, etc.). Therefore, attention should be directed towards immaterial aspects of prosperity, which have been under-represented so far (e.g., time prosperity). Initial studies show that these immaterial aspects have an important impact on life quality (see, for example, Rauschmayer et al., 2011). The results of these studies reveal that lifestyles oriented toward immaterial factors of prosperity are able to fulfill basic needs and to increase life quality. They are thus avoiding an “excess” without necessarily posing a “threat” to companies. Through alternative ways of consuming, they address new target groups that are primarily oriented towards high-quality and sustainably produced goods, which can be used for the long term.

2.4 How can current measures, strategies and framework conditions be modified in order to enable a higher quality of life, despite weak economic growth?

2.4.1 Who is responsible for sustainable consumption?

In the network of politics, science, companies, civil society and consumers, the idea of a **shared and common liability and responsibility** gains in importance in connection with the development of alternative economic models and ways of life. None of these spheres is solely responsible for sustainable development. Consumer decisions for sustainable products and services play a crucial role; however, the establishment of appropriate policy frameworks and decisive entrepreneurial action are important prerequisites to enable consumers to fulfill their responsibility. Important starting points for sustainable **political framework conditions** are, for example, reorienting state funding and public subsidies, supporting sustainable products and services, enforcing compliance with standards and certifications, or implementing educational and information programs in order to create an incentive for sustainable behavior.

Companies could also contribute to awareness-raising and concrete realization: The transparent presentation of the production process and the provision of comprehensive information for potential clients are essential to enable sustainable consumption. The accurate labeling of products could make a decisive contribution to raise the awareness of consumers. At the same time, companies may also contribute to the introduction of macroeconomic measures by exerting pressure on public authorities (keyword: “lobbying for a good purpose”).

Moreover, through new scientific insights, **science** could help to clarify the connections between growth, consumption and life quality; and based on this, it is encouraged to develop new economic models.

Civil society also plays a crucial role. As a “habitat of change”, it could demonstrate possibilities for innovative economic models and alternative lifestyles.

2.4.2 Proposals for measures

Together with the experts, some **concrete measures** have been developed that can be classified into the following five categories:

- A different perception of prosperity – education and role model function,
- Transparency,
- Imparting knowledge and skills,
- Different forms of production/services,
- Macroeconomic measure (e.g., pricing policy).

Moreover, some of the suggestions address the question how to reflect immaterial aspects in the consumption of goods and services: For example, by obliging companies to provide comprehensive product labeling (regarding product contents and production process), consumers may be encouraged to take responsible decisions. The German Sustainability Code (GSC), developed by the German Council for Sustainable Development (RNE), obliges firms to increase transparency. The GSC thus provides an example for a measure that aims at anchoring sustainable corporate policies. In addition, it would be desirable if production and trading companies would offer (or cooperate with) immaterial advisory services (e.g., nutrition counseling is offered in addition to grocery shopping, etc.).

2.5 Conclusion

Slower, stagnating or decreasing growth and a reduced or constant income are not to be equated with a decrease in life quality. However, it has to be taken into account that this does not equally apply to all social classes. Even in countries with a relatively high level of material wealth, there are people with incomes that are not sufficient for a decent standard of living. For this group of people, lower economic growth would imply a deterioration of their life quality (see also Policy Paper “Growth and Distribution”).

From the findings of the Policy Paper „Growth and Life Quality“, it can be deduced that both the access to material elements **and** the satisfaction of immaterial needs are necessary to ensure a high level of life quality. This means that if our material foundations are shrinking, it is still possible to improve immaterial aspects – which can even lead to an increase in life quality. However, this is only possible to a limited extent with respect to material constraints.

Politics, science, economy and consumers should act in a mutually supportive way with regard to a new economic system. This would enable policy makers to oblige companies to operate in a sustainable manner, and to support them with state funding and public subsidies. As a result, consumers would be able to satisfy their needs in a sustainable way. This mutual support would encourage civil society to pursue the improvements that have been initiated.

3 Growth and Public Spending

This Policy Paper discusses how to (re-)shape public spending policies to ensure that its objectives are achieved, also in times of low growth. After analyzing the interactions between economic growth and public spending, Austria's current political situation is described. Finally, we present proposals for measures, which are able to support the long-term vision of an economy that is resistant, oriented towards the common good and less dependent on output growth.

3.1 How does public spending affect economic growth?

Even though the empirical results in this context are not necessarily robust, the positive link between high government spending and long-term growth cannot be proved according to the recent literature. In any case, the relationship seems to be non-linear. This means that not only the extent, but especially the structure and composition of public spending are crucial for growth (see, for example, Pitlik and Schratzenstaller, 2011).

In general, it is assumed that expenditures for important public services (general administration, public security and defence), infrastructure expenditure (transport, communication, etc.) and public goods/externalities (health care, education and environmental protection) have a positive impact on growth. In contrast, spending on redistribution and social security, interest payments as well as expenditures on recovery, entertainment and culture do not stimulate growth (Pitlik and Schratzenstaller, 2011).

Despite, or perhaps because of, the great amount of studies dealing with the connection between government spending and economic growth, there is no simple answer applying to all states and historical situations. According to the assessment of the experts involved, it is clear that the economy cannot grow without any state benefits or common goods. Without doubt, at a certain level of development and per capita income, the importance of public spending for growth starts to decrease. Furthermore, it can be assumed that welfare effects are reversed once the share of the public sector becomes too large. In this case, economic activities and growth would be hampered. However, the actual effects described above always depend on whether the economy is in a recession or in a growth phase.

3.2 How does economic growth affect public spending? Which challenges arise from slow, stagnating or declining growth?

High economic growth rates have a direct and an indirect effect on government spending. *Directly*, in the sense that the necessity for specific expenditures decreases. Unemployment, for example, may decline as a result of high growth rates, which in turn lowers the demand for unemployment benefits. *Indirectly*, economic growth has a positive effect on public revenues, which increases the scope for financing public tasks, provided that the financial resources are not used for debt redemption. Most of the currently raised taxes and duties (e.g., the two main categories: taxes on income and consumption) depend on economic growth. Therefore, tax revenues rise with economic growth.

In times of high economic growth, it is thus easier for the public authorities to finance expenditures without being obliged to raise taxes or borrow additional money. In contrast, low growth rates limit the scope of action for the government because of lower tax revenues. However, especially in times of low growth, public spending cannot be reduced on an arbitrary basis. So far, the necessary funds have frequently been provided by raising further credits. Due to national and EU-wide obligations regarding budget consolidation, public debt cannot be raised indefinitely; actually it even has to be reduced. In times of low growth, tax increases do not constitute an appropriate alternative either. Thus, drastic cuts in social benefits can hardly be avoided, unless the structure of public revenues and expenditures is reformed.

3.3 Status Quo in Austria

In 2011, public spending in Austria amounted to approximately 152 billion euros (this corresponds to a share of 50.5% of GDP), which is relatively high compared to other European countries. In the years preceding the economic crisis, the share of government expenditure has decreased, which, in turn, has led to a reduction of general debt between 2000 and 2007. Due to the interventions during the economic crisis (rescuing banks, economic stimulus packages), expenditure ratio and public debt started to increase again.

Almost half of total government spending is devoted to social benefits, including monetary benefits (such as pensions, family allowances or unemployment benefits) and social transfers in kind (such as medical services). As a result, the effect of Austria's state expenditure system on economic growth is relatively low compared to other countries (Pitlik and Schratzenstaller, 2011). The medium-term financial planning comprises two areas that grow particularly strongly: expenditure on public pensions and health care systems. At the same time, the scope for expenditures on education is decreasing.

The experts involved in the stakeholder dialogues especially criticize the **lack of transparency** with respect to the overall public spending policy. Due to multiple responsibilities of federal structures, neither the financial flows, nor the effectiveness of spending is known and traceable. This also holds for the field of subsidies and financial support, as well as for investments and social spending. Often, it is not clear if public expenditures are targeted at consumption, prevention, investments, or if they are curative. The system is very complex and highly intransparent. This is not only the case for economic promotion, but also for the area of health and education. According to the experts, a huge number of "political obstacles" can be detected, as well as an unwillingness to frame public spending policies that are socially and environmentally sustainable.

3.4 How does a sustainable public spending policy look like that may support the transition of growth towards greater sustainability?

A sustainable public spending policy should guarantee that future generations will also have scope for action regarding fiscal policies, despite prior encumbrances. Besides budgetary aspects, a sustainable public spending policy should consider economic, ecological and social aspects to the same extent.

A sustainable public funding policy is currently associated with the restructuring of public budgets in favor of future-oriented expenditures that enhance productivity and innovation, which in turn should stimulate growth and employment. In **times of continuing weak growth**, special attention has to be paid on ensuring the provision of social security systems, as well as a fair distribution of income. If less financial resources are available, cutting inefficient expenditures and administrative reforms will become even more necessary. The key priority should thus be to enhance structural reforms of public budgets (e.g., shifting expenditures towards investments, structural reforms of pension, health and education systems) and to improve the coordination of budget allocation between the different levels of government.

The experts agreed that new priorities should be translated into decisions on financial flows and transfers. In this context, the following issues have been considered relevant for a sustainable public spending policy:

- Increasing the **transparency of public finance** by providing data, analyses, forecasts and evaluations,
- Higher **participation and self-responsibility of citizens** to extend the information base, for example, how tax money is actually used,
- **Reduction of political obstacles** to enable the realization of necessary fiscal reforms,
- Reorientation and increasing commitment with regard to **institutional framework conditions** (such as Maastricht criteria, European Stability and Growth Pact, etc.),
- **Increasing the efficiency of public spending**, i.a. by:
 - Providing information on the consequences and concrete effects of various types of public expenditure in order to examine unproductive expenditure categories (such as public consumption or subsidies) in more detail,
 - Assessing efficiency by means of “sustainability parameters” (such as life quality or resource conservation),
 - Identifying options for action regarding the types of expenditure that are expected to have a two-fold benefit

(stabilization of the economy in the sense of resilience, and simultaneous increase in public welfare).

The experts involved assume that policy makers are aware that pursuing fiscal policies from the past is neither reasonable nor possible. This would open up leeway for discussions on “Growth in Transition”.

With regard to **public expenditures**, the following measures, which can also be realized in times of permanently low growth rates, are proposed for politics and administration in Austria:

- **Implementation of a state reform**, aiming at the reduction of expenditures. The objective is to transfer decision-making powers to lower levels and to allow citizens to participate in debates on the state budget,
- **Structural reforms in the field of health, public administration and public funding** with exact targets to ensure the financial viability of state budgets,
- **Establishing a lean, dynamic and efficient administration** in order to decrease inefficiencies in the current expenditure system,
- **Enabling greater scopes on regional levels** to foster their responsibility and enable them to offer their services (infrastructure, waste disposal and circular-flow economy, educational institutions, hospitals, etc.) more efficiently,
- **Improving data transparency and the presentation of current transfers at provincial and municipal levels,**
- **Promoting expenditures on investments for the future** (education, research and development, science, environment),
- **Embedding all measures into an integrated strategy in order to fully exploit their effects.**

Short-term negative implications on overall economic demand can hardly be avoided. However, they should be kept as low as possible to make sure that the positive effects of a sustainable consolidation policy predominate in the medium term. This requires a credible as well as long-term oriented **consolidation strategy**.

3.5 Conclusion

This Policy Paper initiates the discussion how to shape sustainable public spending policies, which are also successful in times of low growth. Economic growth and government spending form a dynamic system, which may shrink and expand as a whole. In order to better understand this complex system, it is necessary to analyze the implications of public expenditure more profoundly. However, attempts were made to develop several policy and reform proposals, which are able to ensure the success of public spending policies – also in times of low growth.

From the point of view of the experts involved, it is clear that rapid action is necessary in order to finance public services in the future. The urgency for action results from the current challenges regarding demographic change and the high debt burden. The experts recommend that the need for action regarding Austria's fiscal policy should be regarded as a chance, and suggest pushing sustainable public spending policies ahead quickly.

For the development of concrete public spending policies based on the above-mentioned proposals for action, further discussions are needed. This requires both a sound sectoral evaluation (Which expenditures do have which consequences?), and qualitative analyses (What do we mean by public welfare and how do these expenditures affect public welfare?)

The Policy Paper “Growth and Public Spending“ is dedicated to the memory of **Ulla Hlawatsch** who has encouraged and stimulated this work as regards content.

4 Growth and Work

Employment is one of the major issues regarding economic growth. There is a widespread perception that economic growth creates jobs and reduces unemployment. In the past, this connection could have been observed in many countries. Therefore, many political strategies still put a strong emphasis on economic growth. The central question in the Policy Paper “Growth and Work” is whether this proposition should still dominate the discussions on employment policies in the future. It is not contested that, in a situation of persistent low growth, strategies should be targeted at securing jobs, or respectively, at reducing unemployment. This paper thus also strives for the formulation of possible solutions.

The results presented in this paper are based on a comprehensive literature review and on the discussions with stakeholders and experts. Also included are the outcomes of the “Ökonomischer Wachstumsdialog” 2010-2012, as well as the results of the Policy Paper “Growth and Distribution”, which deals with the options for distribution policies in times of slow growth.

4.1 How does economic growth affect employment? Which challenges arise from slow, stagnating or declining growth?

In economics, the connection between unemployment and economic growth is termed Okun's Law. According to the equation, unemployment drops if production (output) increases faster than productivity. This connection (in contrast to its designation, it does not constitute an economic law) has been empirically proven for several economies and is relatively stable. According to Okun's Law, an increase of 2% in real GDP leads to a reduction of 1% in unemployment (Samuelson and Nordhaus, 2001). In Austria, this negative effect has been true for the last 50 years, although the postulated connection has been weaker than expected.

However, unemployment is not a purely economic phenomenon. Labor supply also depends on **social** (e.g., female employment rate) and **demographic factors** (e.g., ageing of the population, migration), as well as on **institutional framework conditions** (regulation of labor market). The connection between economic growth and unemployment is thus non-linear and again very complex. In some European countries, there has been no increase in employment in recent times, despite economic growth. Other examples show that unemployment fell, although economic growth was relatively weak.

For this reason, it is doubted whether the connection proposed by Okun's Law is still valid under the currently changed growth rates, economic structures and institutions. The productivity growth of the past should not be considered as given (e.g., due to structural changes towards a service economy). Furthermore, it has to be assumed that a slowdown in growth leads to a weakening of productivity growth. This effect could, at least in part, attenuate the negative implications for the labor market.

Marterbauer (2010) points out that, in a phase of weak economic growth and high labor force potential, it would be possible to reduce unemployment by raising the elasticity of labor demand. In general, the elasticity tends to increase together with the structural change from manufacturing to services, and together with the expansion of part-time employment. This effect could even be reinforced by the targeted state measures.

4.2 Which approaches could contribute to secure or even increase employment in times of stagnating economic growth?

Austria – in contrast to Japan, for example – has not made any experiences with persistent low growth so far. Therefore, no attempt has been made to actively search for a solution. Although they are not uncontroversial, we present several important issues that are discussed in this context:

- Flexicurity (flexibilization of employment while ensuring social security),
- Easing the tax burden on labor,
- Differentiated consideration of labor productivity,
- Fair distribution of work (better distribution of lifelong working times),
- Increasing the quality of work and extending the concept of work.

These topics seem especially relevant in case the problem of labor (markets) is discussed in terms of **raising prosperity** that goes beyond GDP, instead of only dealing with the increase of (quantitative) growth (Brand, 2012).

4.2.1 „Flexicurity“

„Flexicurity“ combines the flexibility in employment with the social achievements of permanent employment, while avoiding precarious employment conditions (Auer, 2006). This concept (ideally) links flexible working times with the reorientation of welfare benefits, which are jointly supported by the social partners. Experiences from the Netherlands and Denmark show that flexicurity might decrease unemployment despite of low economic growth rates.

4.2.2 Easing the tax burden on labor

An eco-social fiscal reform might reduce the cost of labor and therefore create more employment; moreover it could have positive environmental effects. This measure would decrease the tax burden on labor (e.g., by reducing non-wage labor costs). In turn, a tax is imposed on resource and energy consumption. Furthermore, environmentally counterproductive

subsidies could be reduced. A study commissioned by the Austrian Federal Ministry of Labor, Social Affairs and Consumer Protection, the Ministry of Science and Research and the Federal Ministry of Agriculture, Forestry, Environment and Water Management (Stocker et al., 2011) shows that these measures could contribute to mitigate the negative employment effects in times of weak growth.

4.2.3 Differentiated consideration of labor productivity

A differentiated view regarding labor productivity could also help to open up leeway for increasing employment in periods of low growth rates.

Depending on the branch considered, there are diverging views:

- It is desirable to further increase labor productivity in order to improve the attractiveness of a business location (e.g., in manufacturing industry),
- It is desirable to decrease labor productivity in order to lower unemployment (e.g., in labor-intensive services) and to improve the quality of work.

The debate on productivity often neglects the quality of products and work (and its interactions), as well as the consequential costs of productivity growth, which results from productivity gains at the expense of employees or the quality of products.

The problem of „**divergent productivity**“ is that personal services (especially in the field of care economy) cannot be rationalized to the same extent as it is possible for the production of goods or ICT-intensive service industries (banks, insurance companies, communication service providers): Putting on a baby's diaper, caring for seniors, medical consultations, orchestral music or teaching in schools are some examples where productivity cannot be raised continuously, neither by technology, nor by standardization.

In general, structural and societal changes may lead to a rising share of personal services, personalized products and services, or the growth of “creative industries”. Depending on the extent of these effects, it can be assumed that labor productivity grows slower, stagnates or may even decline. In case this development is accompanied by more extensive work and better products, it could result into a higher quality of life.

According to some economists, there are several additional limits to labor productivity gains. Possible restricting factors comprise demographic change, lack of qualifications and social costs (stress, sickness, decreasing

motivation), which are associated with further increases in labor productivity. These trends can be specifically addressed by paying more attention to maintenance and repair and by promoting labor-intensive sectors (e.g., nursing and education sector).

Furthermore, economic stimulus packages can be designed more „sustainably“ by devoting more public expenditures to areas where one can expect the greatest positive effects on employment (e.g., in the social sector).

In order to alleviate the negative external effects resulting from work intensification (e.g., stress-related diseases) and to reduce its negative side effects, a set of accompanying measures and new forms of work time reduction (see below) are required.

4.2.4 Fair distribution of work

A closer look at the components of labor productivity reveals possible starting points for the reduction of unemployment, which are targeted at a more even distribution of work. On a macroeconomic level, labor productivity is calculated by labor productivity per work hour multiplied by average work hours per person. Labor productivity thus increases with rising labor productivity per hour and decreases with diminished working time (Spangenberg et al., 2002). In this connection it becomes apparent that **shorter working time** (e.g., by reducing normal working hours, part-time employment, extended leisure time like holidays and leave arrangements or reduction of overtime) may stabilize or even increase the number of jobs, when production output remains constant (as was the case in the 1960s and 70s). However, the positive effects on employment could be reduced by the increase in labor productivity (Baumgartner et al., 2001).

Regarding work time reduction, various approaches can be identified (full or partial wage compensation, without wage compensation or wage compensation relative to the productivity gains). The greatest employment effects result from a reduction of work time without wage compensation (i.e. with constant hourly wages), as labor costs remain constant. This option constitutes an appropriate alternative, especially for highly qualified persons in upper income brackets. At the same time, also employees with low incomes require shorter working hours, i.a. to allow for a better balance between family and work life. In this case, work time reduction should be combined with the introduction of minimum wages.

Besides the positive effects on employment, shorter work hours could also offer more time for social engagement and care work, thereby encouraging the reconciliation of family and work (see also “quality of work”), which in turn would minimize demographic risks in the long term.

However, there are also several arguments against the redistribution of working time, such as:

- Little political acceptance,
- Problems for public financing,
- Risk of work intensification, as previous reductions in working time have always been accompanied by productivity increases,
- Renunciation of income, which would be difficult to accept, given the weak wage and salary increases during the last 10 to 20 years.

4.2.5 Increasing the quality of work and extending the concept of work

The concept of work is commonly equated with gainful employment. However, this notion neglects the field of individual and social reproduction, thus the work hours and activities necessary for society, such as family and educational work, hobbies, caring for relatives and civic engagement. These unpaid forms of work constitute an important foundation for our economy and contribute substantially to the functioning of our society (social capital) and quality of life.

Therefore, any future-oriented debate on work should take into account those aspects. This would result into a different perspective, which would understand good work not only as gainful employment, but would also aim at the creation of prosperity and a good life for all. Good work also comprises activities, which are gladly done for their own sake. This puts the debate on work time reduction into a broader context (Ax, 2009; Brand, 2012).

From the perspective of „Gross National Happiness“, it is not only about “employing” people – it is also crucial why people are employed and what they spend their time on. Many “unemployed” people are indeed capable of engaging in meaningful activities and creating social utility (Ax, 2009).

For many people, the reward of work does not only consist in payment, but also in the dimensions “meaning”, social participation and integration – sometimes also literally “in the work itself”. The field of sociology provides evidence that the world of work increasingly results into experiences of alienation, thereby externalizing the consequential costs (Ax, 2009). Due to efficiency improvements, growing cost pressure and the privatization of public goods, employees have to pay a high price: The loss of vitality, enjoyment of work and health.

In this context, concepts of work are being developed, which do not mainly focus on gainful employment, but on the quality of work (“gute Arbeit”,

“decent work”¹). Thereby, topics such as job security, income and social services, working time and work-life balance, gender justice and job satisfaction are considered (Ax, 2009; Brand, 2012). Besides, these concepts should also take into account societal change in order to safeguard or increase the quality of work, as the latter is closely related to the quality of work results.

Another important aspect in this context are sufficiency strategies (voluntary reduction in consumption), as they have a twofold benefit: If goods and services are produced in the private sector and are thus not sold on the market, the pressure for growth can be reduced. Moreover, energy and resource use would decrease, while life quality might increase.

Questions regarding consumption and lifestyle indirectly depend on (gainful) work, as approaches targeted at reducing work time can only be realized if they are accompanied by a change in consumption patterns and lifestyles (Ax, 2009; Brand, 2012).

Other major issues regarding the debate on a new concept of work are **guaranteed incomes** and **income redistribution**. Socio-ecological prosperity also requires the institutional protection of informal and unpaid work, which could be implemented in the form of a general basic income (Ax, 2009; Brand, 2002). However, this would entail significant changes in the overall social security system.

¹ Already in 1998, the ILO has published a report on decent work, defining good or decent work as follows: „*Decent work is the converging focus of the four strategic objectives, namely rights at work, employment, social protection and social dialogue*“. See <http://www.ilo.org/public/english/standards/relm/ilc/ilc87/rep-i.htm>.

4.3 Open research questions

Regarding the effects of low, constant or negative growth rates on employment and the solutions discussed, there remain a number of questions to be explored, such as:

- How do shorter work hours relate to the reduction of resource use? (Firms do not automatically produce less because of a reduction in work time.)
- What is the link between productivity increases and growth?
- Would economic growth that is ecologically and socially more sustainable necessarily result into an increase in employment?
- Which implications do increasing resource and energy prices have for the labor market? Which are the markets where resources and energy are possibly substituted by labor?
- How is it possible to decouple social security systems from growth?
- Where are the limits for increasing labor productivity in the big service sectors?

4.4 Conclusion

One of the main arguments for economic growth is based on the assumption that growth is necessary to ensure a high level of employment. However, empirical evidence is not able to reliably confirm this proposition. In times of weak growth, employment strategies thus do not have to rely on economic growth at any price. In this context, in a changing economic system possible solutions for the labor market problem should be targeted at increasing prosperity.

In order to implement successful employment policies, also in times of low growth, it is necessary to rely on a broad range of measures, as work is a highly complex topic. Qualitative aspects of work, as well as work beyond gainful employment should thus also be considered.

5 Growth and the role of agriculture as a provider and user of ecosystem services

5.1 Objectives of the paper, definition, context

The Policy Paper „Growth and Agriculture“ aims at providing a comprehensible presentation of the interrelation between agriculture and ecosystem services. At the same time, it considers the development in other economic sectors (change in growth rates, structural change), as well as the development of measures targeted at sustainable agriculture and the maintenance of ecosystem services in times of weak economic growth.

Ecosystem services are services provided by nature that are particularly important for human life. They are classified into preventive, self-regulatory, cultural and basic services. They comprise services such as the provision of drinking water and food, air cleaning, recreation, experiencing nature, as well as material cycles and soil formation (MEA, 2005). Due to the quality of these services, only some of them can be assigned a market value, e.g., through the price of timber or food.

Agriculture plays a major role with regard to ecosystem services, as it can make a significant contribution to the maintenance and support of biological diversity. It influences the quality and availability of water (e.g., leaching of fertilizer and soil erosion), as well as the soil condition (Umweltbundesamt, 2011a). Intact ecosystem services are the precondition for food security and the simultaneous preservation of a diverse cultural landscape. However, agriculture is also a user of ecosystem services, as it depends considerably on natural cycles, water supply, soil formation, pollination by bees, and the protection against natural hazards. In the last years, however, structural changes in agriculture have led to an intensification or abandonment of use. The growing demand for land (due to food production, biofuels, etc.) and the continuous reduction of agricultural production areas due to increasing soil sealing imply an increasing pressure on the remaining surfaces. This trend poses a risk to the diversity of cultural landscapes. Furthermore, the intensification of agricultural production may result into, i.a., nutrients being washed out in waters, water scarcity, loss of soil fertility and monotonous cultural landscapes.

During the two stakeholder dialogues, the following questions have been discussed:

- Question 1: What are the implications of lower economic growth for agriculture and its provision of ecosystem services?
- Question 2: What happens in case public funding is reduced?
- Question 3: Which instruments and strategies are necessary in order to maintain or increase the provision of ecosystem services in times of weak growth?

5.2 What are the implications of lower economic growth for agriculture and its provision of ecosystem services?

Agriculture depends on resources and preliminary services and is thus affected by price fluctuations on the respective markets (e.g., energy, fertilizer, etc.). Therefore, changes in economic growth could have indirect effects on agriculture. Weak economic growth and the resulting lower household incomes might increase the demand for cheaper (and thus less sustainably produced) food. Changes in values and consciousness could also lead to more conscious consumption practices (organic food, subsistence strategies, farm-gate sale). However, it is not clear how this trend would develop under the condition of lower household incomes. Extensive areas could be affected from emigration or the abandonment of farms, whereas favorable locations might experience an intensification of agriculture. It is also conceivable that, due to the lack of professional alternatives, a revaluation of agriculture takes place.

5.3 What happens in case public funding is reduced?

Austria's agriculture is strongly influenced by the EU Common Agricultural Policy (CAP), which provides direct decoupled payments to producers and supports rural development (e.g., by compensation payments for disadvantaged regions and agro-environmental measures) (BMLFUW, 2012). The reduction of subsidies would result into economic losses for many agricultural undertakings. This might imply land abandonment or the exit from funding programs that are accompanied by (environmental) conditions. Especially in extensively farmed areas, the decrease in compensation payments could lead to a stop of cultivation, which means that land would become fallow or undergo forest encroachment. At the same time, favorable locations would be subject to intensified cultivation. This situation could aggravate the contrast between intensively used areas and sparsely populated regions. The abandonment of farms and the resulting emigration could be followed by the breakdown of social structures (e.g., schools, doctors, etc.), which would pose a major challenge for local politics.

5.4 Which instruments and strategies are necessary in order to maintain or increase the provision of ecosystem services in times of weak growth?

It can be assumed that the financial support provided by CAP will be lowered in the future, which makes the efficient use of these financial means particularly important. Research funding should be especially oriented towards long-term analyses of ecosystem services, as well as on studies dealing with the implications and corresponding strategies of a changed subsidy policy. The results would ideally be included into education and training, where dialogue platforms and stakeholder dialogues enable an intensive exchange of all involved parties, thereby raising the awareness for ecosystem services. The promotion of cooperation and networks (e.g., by decreasing the tax burden for cooperating farms and supporting regional networks) might strengthen sustainable agricultural structures, e.g., by new and innovative products and the establishment of appropriate marketing channels. The field of governance also holds enormous potential: The currently high land use could be reduced by means of a 15a-agreement (agreement between regional and national authorities) and by introducing a fee on the construction of buildings on high-quality agricultural areas. Furthermore, an eco-social fiscal reform would constitute an important measure that guides consumers' behavior towards sustainable consumption. Regional development should especially focus on regional particularities; the federal government could offer financial compensations for regions, which base their development strategies in particular on sustainability.

5.5 Conclusion

It is conceivable that lower economic growth rates result into a reduction of agricultural subsidies. In fact, two opposing effects can be expected: On the one hand, an agricultural intensification of favorable areas and the abandonment of (extensive) farms, and on the other hand, an increased awareness among the population about high-quality food, a change in demand and the strengthening of organic agriculture. The first effect, as well as the current trend to more stringent conditions and the associated exit from funding programs would have negative implications on the provision of ecosystem services. This effect is caused by agricultural intensification, which may result in nutrients being washed out in waters, scarcity of water resources, loss of soil fertility and monotonous cultural landscapes. Similarly, the quality of agricultural products could deteriorate if less sustainable cultivation practices are applied.

In order to counteract these tendencies, there is an urgent need to develop and implement appropriate strategies and concrete measures, which also enhance the second effect described. As Austria's agriculture is highly dependent on the support of CAP, the room for maneuver is limited. Therefore, measures in the field of regional development seem to be promising, as well as alliances and awareness raising among the population. Here federal and regional authorities, different sectors (e.g., retail sector, tourism, industries) and civil society should cooperate and develop new innovative strategies, in order to maintain or provide ecosystem services also for future generations.

6 Growth and Macroeconomic Resilience

In terms of sustainable development it is important to design a new model of prosperity, which is no longer dependent on higher growth rates. As shown in this Policy Paper, the concept of economic resilience provides an appropriate framework for this purpose.

The term resilience is used in various scientific fields. It takes a high priority especially in the newer disciplines of sustainability research (e.g., Ecological Economics) and in systems theory, which are closely related. Supported by an interdisciplinary discourse, the concept of **socio-ecological resilience** has found its way into international environmental policy and had, for example, a significant impact on the well-known "Millennium Ecosystem Assessment" initiative (MEA, 2005).

This paper focuses on **economic resilience**, where a distinction is made between a static and a dynamic concept. An economic system is statically resilient if it is able to absorb shocks, loss or damage (Holling, 1973; Perrings, 2006). Dynamic resilience means that an economic system has the ability to recover from a crisis or perturbation as quickly as possible. The system-theoretical assumption is that systems have an inherent tendency to stability, even if they are exposed to changes, which, in general, would be opposed by the system participants.

The stakeholder debate illustrated that the interpretation of the resilience concept is not unproblematic. Since resilience is usually considered as an optimum, there is a tendency to increase the resilience of a system. While this may lead to inert systems that are no longer able to develop, also a general change can (subjectively) improve the situation of the actors involved. In addition to transformability, resilience research aims at a higher adaptability of systems. The latter can be understood as the ability of human beings to cope with environmental changes by observing, learning and adapting their influence on the environment. To point out the key topics, contexts, possible solutions and policy approaches to the issue of macroeconomic resilience, and to propose concrete measures for policy and administration, five questions have been selected, which will be discussed below.

6.1 What are the interrelations between resource scarcity/resource consumption and economic growth?

Already at the beginning of the 1970s, Meadows et al. have warned of the scarcity of resources and advances in prices in the first Club of Rome report „The limits to growth“ (Meadows, Meadows et al., 1972). According to this report, economy will encounter the limits of growth, both on its input and output sides (sinks). On the input side, it can be assumed that resource shortages and prices for strategic resources will grow in the coming years, especially regarding oil, but also coal. Exceeding the “resource peaks” means that the (politically and geologically) most easily accessible deposits with the highest resource concentrations are exhausted and that new discoveries generally become less favorable. This increases the costs for exploration, extraction and refining, as well as possible follow-up costs.

In the debate about possible shortages of resources, it is often forgotten that in a „full world“, the ecosystems’ absorbing capacity (sinks) for the residues of human activities also represents a scarce „resource“. Ecological resilience research gives warning of exceeding certain thresholds because of anthropogenically caused changes. The equilibrium of the system could shift in the direction of a (for humans) less desirable, poorer condition (e.g., Folke, Carpenter et al., 2002).

The shortage of resources and their increase in prices has already led to a globally excessive use of the commodity frontiers (Martinez-Alier, 2002) at the expense of the last unspoiled regions of this planet. This has disastrous social and ecological consequences.

The issue of resources is viewed quite differently in the economic mainstream, where the limits to growth do not exist due to technological progress and the resulting substitutability of resources. According to standard economic theories, a shortage of resources leads to a rise in prices, resulting in incentives to develop new technologies that will lead either to an increase in efficiency and thus to lower consumption, or the utilization of alternative resources (Cameron und Neal, 2003).

Critics of the report „The Limits to Growth“ also argue that growth is not the problem per se, but only the growth of material throughput. Theoretically, the economy could continue to grow if ways can be found to simultaneously reduce the amount of material throughput in absolute terms. So far, there are no noteworthy successful examples for such an absolute decoupling of growth and resource consumption (except, perhaps, for certain air pollutants) (Dittrich, Giljum et al., 2012).

6.2 Does economic growth improve or deteriorate resilience?

Herman Daly illustrates his call for abandoning economic growth in a graph, in which he shows the „full“ and the „empty world“ (Costanza, Norgaard et al., 1997). Many economic theories see growth as an axiomatic necessity and solution for all economic problems of people. These theories have their origins in a world that has still been „empty“; in other words, a world in which the size of the human economy (as measured by material throughput, population and artefacts) has been absolutely irrelevant compared to the natural environment. Since the world is limited, a further expansion of the economy increasingly limits the scope of action in the event of a crisis situation and thus, by definition, also reduces resilience.

One expressed opinion is that growth vs. shrinkage is irrelevant for resilience. A shrinking economy can emit as much or even more as a „gently“ growing economy (see van den Bergh 2011) for a similar opinion in the literature). The fact of the matter is that the economic crisis in 2008 has led to a massive global reduction of pollutant emissions (Martinez-Alier, 2009). Nevertheless, it can be assumed that zero growth or degrowth, is neither a necessary nor a sufficient condition for economic resilience.

6.3 How can the negative effects of lacking resilience and absent economic growth be mitigated?

According to the literature cited in this Policy Paper, a system can only maximize its potential if it adapts to its cycles. It can be assumed that, for our economy, natural resources become more and more scarce and expensive in the future (for whatever reason), which is even desirable from an environmental point of view. Therefore, it makes little sense to preserve or even stimulate certain infrastructures or structures according to a Keynesian approach (i.e., the state invests to boost the stagnant economy). Nevertheless, it should also be remembered that, for example, austerity policies are generally necessary, but that draconian saving measures would stifle economic activity. Therefore, it is obvious that this approach is socially highly incompatible and as an adaptation process also inappropriate. A common conversion of subsidies and budgets, which are no longer relevant or even environmentally harmful, therefore seems to be all the more important.

In view of the fact that resource consumption depends heavily on prices (and supply), already now it would be desirable to intervene by regulating prices or quantities. If we would already start to limit the material and energy flow in a successive and socially gentle way, we could gain time and social understanding to set the right signals for the adaptation process. An initial step would be a carbon tax on all hydrocarbons (depending on CO₂ levels, etc.) or a per capita consumption rate. Other questions that have been discussed in this context are related to distributional issues and accompanying measures, which would be taken in favor of low-income earners – also at the international level.

6.4 In which sectors measures should be taken and what is the role of resource efficiency in increasing economic resilience?

According to various economic approaches, climate change – as well as the absence of financial market stability – has given rise to clear market failures. A more rigorous global regulatory mix would be necessary to overcome these market failures. One participant noted that the EU has taken a leading role in many ways, in terms of the immediate environmental acquis². Large deficits were noticed especially regarding the systemic integration of environmental challenges in issues of resource efficiency, climate change, biodiversity and development.

Viewed from another perspective, incentive systems would be advantageous compared to regulations and “straitjackets”. In contrast, it can also be argued that incentive systems are not sufficient because the overall responsibility is transferred back to the individual and thereby it is not possible to escape from social dilemmas. Accordingly, regulation has not only restrictive but also enabling effects. Thus, for example, the smoking ban in restaurants implies that non-smokers can enjoy their dinner without odor nuisance.

In accordance with some representatives of resilience research, market-based specialization is rather disadvantageous for resilience. This suggests that local conditions should be promoted, as shown by the last point. Of course, the significance is limited because extreme efforts for self-reliance are not only economically inefficient but also tend to reduce the productivity of natural resources, increase the consumption of resources and can thus weaken resilience.

From a perspective of resilience, it has been pointed out that a trade-off exists between efficiency and resilience. As clarified in the concept of Panarchy (e.g., Gunderson and Holling, 2002), resilience is a question of adaptability and transformability. To meet these qualities it is sometimes necessary to dispense with efficiency savings, for example through specialization.

Solving the “energy problem” by renewable energy is widely seen as an answer to all the problems of our time. Although this undoubtedly constitutes a major factor for sustainable development, one should not expect miracles without any accompanying efficiency and embedding measures (keyword “lean economy”), i.a. because the production of the necessary equipment and devices is resource intensive as well.

² The term „Acquis“ denotes rights and obligations that are mandatory for all member states of the European Union (EU). To join the accession negotiations, candidate countries have to adopt the established body of EU law and transpose it into national law.

6.5 How to ensure that precaution is taken in a stagnating or slowly growing economy, also with regard to social components (poverty, social structures, etc.)?

In Austria, a legally anchored study commission (like in Germany) would be desirable, in which the “most capable minds” deliberate on possible crises, its consequences and on appropriate provisions that Austria should make in the sense of vulnerability reduction.

It can be assumed that some limits are already exceeded by the current economic strategy. In this regard, it is important to communicate the crisis as an opportunity and to highlight the urgency for action. In contrast, it is not very constructive to spread anxiety and panic, which may lead to knee-jerk reactions or resignation.

A positive and constructive communication concept also includes the development of visions. In terms of resilience and adaptation, it is important to dare to think outside the system boundaries. Afterwards it should be considered how to approach this goal in small steps. Although some of the goals seem unattainable, one should not lose courage to attain them if they are regarded as desirable (Kerschner, 2008). In fact, this is what we already do in some ranges of politics, e.g. with regard to the goal of full employment.

Among the forms of capital, comprising physical capital, natural capital, human capital, financial capital and social capital (Porritt, 2006), the latter has a unique position in managing crises. Social cohesion and the social capital of individuals guarantee common creativity and strength for crisis management. Modern social capital research has not only constantly improved its measuring methods but also provides a range of possible actions to foster social capital. Unfortunately, the results of the recent years suggest that social capital is declining in wealthy countries. The resilience of a community or society can be significantly strengthened by increasing social capital.

The appropriate management of crises implies rather more than less political commitment, especially in order to involve the population by promoting active citizenship, participation (modern forms such as citizens' fora, citizens' congresses, etc.) and more direct democracy based on a highly transparent administration. Given the enormous challenges the national and international economy is facing, these actions are inevitable. The risk of social discontent increases, for example in connection with drastic price increases in commodity prices, if citizens are not familiarized with pending issues (e.g., peak oil) and not involved in solving processes.

6.6 Conclusion

Despite several unknown details on the issue of peak oil and resource availability, the participants of the stakeholder dialogue all agreed that the global and the Austrian economy face major challenges in terms of economic resilience against the background of a continuing increase in resource demand. For most of the participants it was clear that the economy could grow less, differently or not at all, or even shrink in the future.

When dealing with resources, the first priority, however, should be to improve data collection, reduce resource consumption through price controls (eco-social fiscal reform) and/or reduce quota agreements. In any case, it is important to regularize the market to avoid wastage (e.g. reparability and planned obsolescence of products). Also with regard to traffic and mobility, bold steps should be taken into a new direction. For instance, it is particularly important to minimize the transport distance of goods and people or to move away from the idealization of individualized mobility and to promote public transport instead. The highly praised electric mobility can at best be regarded as a transitional solution. Finally, it is important to consider the psychosocial component from the outset and to promote universal solidarity and social capital. In this context, it would make sense to “empower” people to enable them to “cover” themselves socially and collectively, but without sealing themselves off.

7 Growth and Resilience at the Corporate Level

This Policy Paper discusses how to increase resilience at the corporate level to enable a sustainable development, even in low-growth periods. For this purpose, first, the concept of resilience is explained, and the relationship between economic growth and resilience on the corporate level is briefly described. During the stakeholder dialogues, it has been found out that a detailed analysis of individual companies within the time and budgetary constraints of the project is not possible. Therefore, the focus was placed on the entire corporate sector (thus on a rather meso-economic perspective).

In the context of the investigation, important components of natural, human and social capital are analyzed exhaustively. Up to now, these points have been disregarded in many companies. On request of the client, we provide a comprehensive description on natural capital, with respect to relevant policy and legislative frameworks as well as initiatives. Based on these findings and in cooperation with experts and stakeholders, measures are elaborated that strengthen the resilience in low-growth periods. Furthermore, we set out the need for research to better understand the interactions between the different types of capital and the resilience of companies.

7.1 The term resilience

In the context of this Policy Paper, resilience can be understood as the tolerance and resistance of companies towards disturbances and crises, and the ability to exploit opportunities through changes in order to achieve a new and better starting point.

The preparation for predictable scenarios is only one component of resilience. A company is only resilient if it is dynamic and flexible enough to cope with unpredictable situations, not only with predictable ones.

In recent years, companies have increasingly improved their ability to respond to crises. However, in their daily business they often wrestle with raising capital (see chapter 7.3). Emergency management and programs for a steady process often compete with profit driven activities. For the latter aspect, indicators measuring the success (material growth) already exist. Yet resilience also focuses on social and cultural factors in companies of which the financial impact is not easy to measure.

7.2 Resilience and economic growth

The increase in scientific and political debates on resilience can be partly explained by the fact that the resource, economic and environmental crises in recent times have seriously tested the resistance of many environmental and economic systems. As Austria is a very open economy, especially energy and resource crises (besides possible further financial crises) constitute a potential threat to the Austrian economy in the medium to long term. Even experts of the International Energy Agency (IEA) assess the energy crisis as one of the most urgent challenges to be taken up over the next few years. Also political and scientific interests regarding the availability of resources, particularly in relation to critical resources for future technologies (e.g., rare earths), have recently increased.

With decreasing or even negative growth rates, the question arises to what extent Austria is prepared for these challenges, and what can be done by and for companies to strengthen the resilience of the economic system. Long-term strategies to increase resilience through prevention and adaptation are not yet available and should be developed.

7.3 An enhanced concept of capital at the corporate level

At the corporate level, various resources (also called capitals) are relevant for the investigation of resilience. The concept of capital offers a way to capture all kinds of stocks companies derive a benefit from. Porritt (2006) distinguishes five types of capital: **natural capital** (renewable and non-renewable resources), **human capital** (individual skills, health, knowledge, and motivation of people), **social capital** (institutions, networks and relationships), **infrastructure capital** (material goods such as machinery and buildings) and **financial capital** (as an exchange medium for other capitals and to assert claims of ownership). The various capitals are interconnected and therefore influence each other mutually. Another issue worth mentioning is that the stock of human and social capital – in contrast to other capitals – increases if human and social capital are used.

This comprehensive analysis of capital bases goes beyond conventional approaches because it does not only take into account the “flows”, e.g., production and consumption flows, but also regards the stocks of infrastructure, natural, human and social capital as a source of business success.

In the field of natural capital, resource efficiency in Austria has been increased over the last few decades; however, the absolute consumption of resources has risen. **An absolute decoupling of economic growth from resource consumption** has not taken place until now. The dependence on imported fossil fuels and metals should be evaluated critically because Austria does not have any or only very few of these minerals.

Austria is a sophisticated economy that is highly dependent on imports. Hence, it can be expected that resource efficiency has a strong influence on the resilience of companies. A more resource-efficient production allows companies to reduce their dependence on imported raw materials and to become more resilient. Besides that, resource efficiency protects the environment, provided that the resources saved through efficiency improvements are not used for quantitative growth (rebound effect).

There are already a number of initiatives targeted at improving resource efficiency, both by the state and by industry. However, more far-reaching measures are necessary to achieve an absolute decoupling between consumption of resources and economic growth.

An increase in **human capital** is also very important for resilience at the corporate level. In general, the development of motivation, health and skills increases the satisfaction of the persons involved. This can be observed in connection with, or independently of, growing incomes and status.

It can be assumed that the success of an organization and its investment in human capital are closely interrelated. To prove this link, a number of efforts are made to measure the human capital of organizations (e.g., by the Human Potential Index). It is necessary to strengthen and further develop these attempts.

High **social capital** causes individuals - both in groups or individually - to become more productive, efficient, creative and thus more resilient. Social capital includes families, communities, work environments, trade unions, voluntary organizations, the legal and political environment, as well as education and health care systems. Furthermore, social capital also comprises norms and values, as well as information systems.

Social capital research puts the main emphasis on the **measurement of social capital**. These measurements are supported by survey techniques that have already been evaluated many times. The available results imply that social capital is decreasing in affluent countries. Therefore, it is necessary to actively increase social capital through appropriate measures and strategies.

7.4 Measures and need for further research

Together with many experts from various disciplines, concrete proposals for action have been elaborated to strengthen the resilience of companies, even if economic growth is weak. The results of the science-stakeholder dialogue illustrate that the generation of knowledge is not sufficient, and that it is also necessary to apply them adequately. In this context, it is necessary to create the right **overall** framework conditions (more basic research, resilience valuation, targeted information, long-term planning and legal security, inclusion of sustainable subjects in courses of studies).

In the field of **natural capital**, i.a., appropriate contingency plans are to be developed, and resource efficiency has to be increased. In addition, the currently high quality standards for secondary resources must be revised to prevent the evasion to primary resources, which would allow greater resource savings. Beyond that, there is need for further research, development and promotion in the discipline of product services (PS), food and agriculture, which represents a promising path towards resource conservation.

Before concrete measures can be proposed in the area of **human and social capital**, it is necessary to deepen the knowledge in the following fields:

- Development of appropriate indicators and their standardization for the social sector,
- Conducting more transdisciplinary pilot studies that leave sufficient room for adjustments,
- Networking of existing knowledge,
- More emphasis on soft skills in trainings and better cooperation between educational institutions and companies in order to concretize the necessary requirements and enhance the implementation in practice,
- Further exploration of the different dimensions of social capital (such as social interactions, trust in organizations and shared visions of employees) and their mutual interactions,
- Further studies to assess the extent to which social capital can be evaluated in monetary terms,
- Opportunities for networking of existing knowledge (part of human capital) to increase creativity and the capacity for innovation,
- Support of multipliers of the economy (e.g., associations, interest groups, chambers) that mainly help SMEs to take advantage of and integrate human and social capital in everyday business.

Further research in these areas and the implementation of the findings in enterprises could help to increase the stock of these two capital forms. This could increase the knowledge, motivation and social skills of employees, and make the company more resilient and adaptable in crisis situations.

7.5 Conclusion

The strong emphasis on natural, human and social capital offers companies the opportunity, besides purely economic metrics, to include a wide range of other factors in the assessment of their business's success, going beyond the pure maximization of profit and seeking to achieve a sustainable business development. These capital components are of great significance for resilience at the corporate level, especially in low-growth periods. To make corporates recession-proof and resistant, it is necessary to take expedient measures to increase these types of capital. There is still great need for research in order to achieve the necessary improvements.

8 Growth and Leadership

B.A.U.M. Austrian Network for Sustainable Management was responsible for the stakeholder dialogue and the Policy Paper “Growth and Sustainable Leadership/Sustainable Management”. Assuming that “growth as usual” is not tenable in the long run, the Policy Paper deals with challenges and issues of our time that entrepreneurs and the economy have to take up to achieve the transition to a *Green Economy* (UNEP/UNCSD) and to a qualitative growth path („*smart, sustainable and inclusive growth*“ – EC 2011).

Like all other Policy Papers, also the B.A.U.M. paper is based on a **stakeholder discussion** on this issue and wants to encourage further reflection, discussion and change. The key question is: *Which contribution can the economy make to a sustainable future growth?*

8.1 Statements of the stakeholder dialogues

The important statements of the stakeholder dialogues are briefly summarized in the following:

Regarding the status quo:

- **The limits to growth have been reached and some of them have partly been exceeded.** The exploitation of resources is rampant. See peak oil, scarcity of resources, destruction of biodiversity, overfishing, deforestation, climate change, etc.
- **The policy frameworks are heading in the wrong direction.** Unbridled growth creates more harm than benefit. The consequences are:
 - Financial and economic crises, speculation transactions,
 - Oversaturated markets, unequal distribution of income, rising employment,
 - Increasing poverty,
 - Political and social instability.
- **Sustainable growth** („*sustained, inclusive and equitable growth*“ - UNCSO-RIO+20 Conference 2012) **requires from politics and the economy**
 - A value change in politics, economy and society,
 - New economic policy frameworks,
 - Innovation capacity, resource efficiency, cooperation,
 - Corporate cultures based on responsibility, respect and fairness,
 - Redefining success, adaptation of business strategies,
 - Temperance, meaningful tasks,
 - Confidence building,
 - Courage instead of fear.

8.2 Conclusion

B.A.U.M. Policy Paper Sustainable Leadership – Conclusion:

To us, “Growth in Transition” means “economy in transition”.

The global objectives of the UN Conference RIO+20 *The Future We Want - Sustainable Development Goals - A green economy in the context of sustainable development and poverty eradication* are requests to the economy for sustainable change, international cooperation and for regional and local implementation of a variety of entrepreneurial measures on the path to a sustainable economy and to sustainable growth.

Sustainable Leadership is an active entrepreneurial approach off the beaten track of *business as usual*, aiming at the development of a system, in which less unhealthy growth leads to higher prosperity and quality of life.

In concrete terms, this means for entrepreneurs:

To preserve and improve what supports sustainable development and to bring about changes that enable and promote sustainable development:

- Future-compliant management,
- Corporate Governance based on the principles of *Sustainable Management* and *Sustainable Change*,
- Temperance regarding sustainable growth,
- Increasing the efficiency and improving quality,
- Realizing resource and energy efficiency, clean technologies,
- Being responsible for employees, the society and the environment,
- Cooperation, exchange in experience and export of know-how and best practice (e.g., waste management, recycling, energy efficiency, etc.),
- Innovations for green products and green jobs,
- Social innovation, comprehensive development of leadership,
- Fairness in the entire value chain.

Sustainable Leadership must also be a priority for policy makers in order to implement the international and national objectives of the *Sustainable Development Goals*, regarding

- In particular, the reduction of extreme inequalities in economy and society,
- The reduction of poverty,
- The regulation of financial markets,
- The introduction of a transaction tax,
- An ecological tax reform,
- A drastic reduction of military expenditure,
- The increase of financial resources and support for developing countries,
- Investments and innovations in education and training.

9 Growth and Energy

The Policy Paper “Sustainable Energy System – a Chance for Austria “ shows that the energy system will be subject to a fundamental change in the next decades. Regardless of whether economic growth will be weak or strong over the next few years, this change is considered to be necessary. Since a reliably functioning energy system, which meets the needs of the economy and the consumers, is a prerequisite for a functioning economy, the design of this transformation is of highest importance, in Austria and also at the European level.

The following key points are central to a sustainable energy system:

- No significant shares of fossil fuels are required.
- A high level of energy efficiency and the avoidance of redundant energy services are essential prerequisites for a sustainable energy system.
- Renewable energy sources can be used without serious negative effects on the environment.
- Sustainable energy supplies do not require nuclear power.
- Energy services are affordable and the energy supply has a very high degree of supply security.

9.1 Theses of a sustainable energy system

The discussion of the current situation, the outlook for the coming years up to 2020 and beyond, as well as the development of proposed measures is based on the following assumptions:

1. Economic growth alone – whether strong or weak – does not lead to a transformation process towards a sustainable energy system.
2. Energy efficiency and renewable energies are the pillars of a stable, secure and affordable heat supply in the future.
3. A secure, affordable and competitive electricity supply based on renewable energy requires also European responses.
4. Sustainable mobility is an essential precondition for a sustainable energy system.
5. In order to ensure the transformation towards a sustainable energy system, long-term goals, strategies and legislative frameworks are needed.

9.2 How does economic growth affect energy consumption?

A historical analysis of the data for Austria until 2005 shows a very close correlation between economic growth (indicator: development of GDP) and energy consumption (both gross domestic consumption and final energy consumption) (Statistik Austria, 2011). Conversely, **slow growth** thus restrains energy demand. However, **slow growth per se is neither a key driver for energy efficiency nor for the accelerated expansion of renewable energy sources**. In addition, scenario analyses with different assumptions about average economic growth rates show that the transformation to a sustainable energy system will not occur without any further measures. (Umweltbundesamt, 2011b).

9.3 How does a sustainable energy policy look like that supports both an energy transition and a change in growth toward greater sustainability?

Essential for an energy transition is a consistent, rapid and decisive action by all concerned actors across all sectors. Since an appropriate framework for consumers and for the economy is necessary, and because the public sector has a considerable role model function and leverage effect, the discussants proposed the following measures:

- Greater consideration of the sustainability of public investments; it must be ensured, for example, that in economic stimulus programs, ecological aspects will be more important than before, and that investments in unsustainable sectors are avoided completely.
- Public and private R&D activities should focus on renewable energy and energy efficiency because they are key factors for innovations. Subsidies that favor non-sustainable energy consumption should be ceased by 2015.
- Investments in energy efficiency activities as well as in the development of renewable energy sources must be ensured even in slow-growth periods.
- Austria is part of the European Union; energy agendas are increasingly determined at the European level. Thus, an active European energy policy is a necessary complement to national measures.

In the field of heat, the focus should lie on final consumption because significant energy savings can be achieved with current technologies, without sacrificing heating service providers (residential and non-residential buildings). The demand for energy substantially depends on the stocks of buildings, which often have very poor thermal quality.

The measures in the segment of electricity should concentrate on power generation. This is due to the fact that, despite essential improvements in consumption efficiency, all common scenarios assume an increase in electricity demand. This growing demand has to be ensured, parallel to the expansion of electricity from renewable energy sources. The measures aim to give renewables a fair market opportunity and to avoid market inefficiencies, which require a clear regulatory framework.

In the segment of mobility, the measures are targeted at the reduction of mobility requirements. However, these measures only take effect in the medium to long run. In parallel, the efficiency of passenger and freight transport and the use of renewable energy sources should be increased. The setting of price signals would be effective in the short run. However, this measure has to be implemented within the framework of an ecological tax reform in order to prevent social and economic upheaval.

9.4 Conclusion

The transformation of the energy system is not only essential from an environmental perspective. In the medium to long run, it also makes sense economically and it is necessary from a social perspective because:

- Fossil fuels will become more expensive in the future, due to the increasingly difficult drilling conditions and growing demands.
- The environmental impacts and thus the external costs, which have to be borne by the society, will rise.

Finally, investments in renewable energy and necessary infrastructure will lead to:

- A decreasing dependence on imports of fossil fuels (which may also have significantly more volatile prices in the future),
- Considerably less resources for corresponding imports going to foreign countries,
- A smaller climate footprint,
- An increase in the domestic value added by domestic production,
- Significant growth opportunities for companies in the segment of renewable energies.

However, to realize these effects, adequate guidelines and robust policy frameworks at the European and the national level are necessary.

10 Growth and Distribution

Based on the assumption that the growth patterns of recent decades can no longer be sustained in the future, the Policy Paper “Growth and Distribution” deals with arising questions and challenges for the future design of distribution policy.

10.1 Which interactions exist between income and wealth distribution and economic growth?

Economic growth and distribution mutually affect each other. In principle, a more equitable distribution can be achieved easier in periods with higher growth rates, since it is less problematic to redistribute increases in income compared to a constant value. However, the analysis of income and wealth distribution of the last 30 years shows that growth does not necessarily lead to a more equitable distribution because inequality tended to increase during that period. In this context, the prevailing political conditions play a central role as they are able to make a significant contribution to an equitable distribution, especially in times of continuing weak economic growth.

Conversely, the respective situation of income and wealth distribution has an impact on economic growth. While some distribution theories assume that inequality, due to productivity incentives, is associated with positive growth effects, numerous studies hint at the negative growth effects resulting from inequality. It can be assumed that an extreme polarization of income and wealth creates the wrong incentives for economic activities, increases economic uncertainty as well as volatility, and reduces consumer demand. Some research works highlight the crucial role of increased income inequality as a cause of the current financial and economic crisis.

10.2 How could an equitable distribution increase the stability of economic and social systems, and improve the environmental situation?

In terms of a comprehensive sustainability concept, distribution policy should take into account both economic and social stability, as well as quality of life and ecological aspects. Based on the present studies, it cannot be clearly concluded that inequality leads to greater economic instability. However, some economists come to the conclusion that the current crisis was caused to a large extent by the rising inequality over recent decades. An equitable distribution is not only decisive for economic stability, but also a key factor for social stability and quality of life. Thus, above a certain level of income, a more equal distribution of income has a positive effect on life satisfaction. Moreover, it can be shown that social and societal problems (e.g., crime or drug addiction) occur more frequently in more unequal societies, while the population in more egalitarian societies benefit from better health conditions and school achievement, as well as higher equality of opportunities. Distributive justice in terms of a more even distribution of work also has a positive effect on quality of life. This could be achieved, for example, by a reduction of working hours. Shorter working times would not only lead to an increase in work-life balance but also to a more equal division of labor between the sexes, which would greatly enhance equal opportunities between women and men. Furthermore, reduced working hours could have a stabilizing effect on employment as well, which is particularly important in low growth periods.

According to research studies, a more equal distribution of income is also accompanied with positive environmental effects. First, the willingness for altruistic behavior (e.g., the majority of environmental actions) is stronger in egalitarian societies. A second mechanism of action arises in the context of working hours: Due to the Veblen effect, people in more unequal countries work, on average, longer hours, which is again associated with a higher environmental burden. As low-income groups have a higher propensity to consume, it is also conceivable that the harmonization of income differences is initially accompanied with negative environmental impacts. However, it can be assumed that, in the long run, a reduction of inequality has positive effects on the environment, which results from the reduced pressure to grow.

10.3 Which possibilities for distribution policies arise in times of low growth?

Policy framework for more distributive justice

Governmental distribution policy plays a key role in the redistribution of income and wealth and becomes even more relevant in periods of decreasing growth rates. In Austria, current distribution policies depend to a large extent on economic growth. Declining growth rates would lead to a stagnation or even reduction in income, employment and demand. In addition, this would result into declining tax revenues, which serve as a basis for distribution policies. Under the presumption of declining growth rates, new approaches are required to make distribution policy independent from economic growth. Finally, it should be ensured that, even in low-growth periods, sufficient public revenues are achieved to ensure the realization of redistributive measures.

Political actions for more distributive justice

In the field of **taxes and charges**, it would make sense to reform the income tax and to increase the taxation of wealth; thereby the tax burden on labor could be reduced. Other starting points are the introduction of a financial transaction tax and the reform of the taxation of apartments (Keyword: imputed rents).

With regard to the **provision of public goods**, the redistribution effect could be improved in particular by an increased provision of social services (e.g., public housing, family benefits). A guaranteed provision of basic supplies, for example, has the potential to ensure that large swathes of the population have access to high quality public goods.

Public redistribution policy does not only affect the distribution of secondary incomes, but also the distribution of **primary incomes**. In this context, the introduction of an industry-wide minimum wage, the limitation of top incomes, as well as a coordinated wage policy at the EU level could contribute to a more equal distribution of primary incomes.

An important aspect of distributive justice is the equal distribution of work, which could be achieved by a **reduction of working time**. This could be implemented by decreasing weekly work hours via the collective agreement; moreover, shorter working hours could be realized through the reduction of overtime, the extension of maternity/paternity leaves, or the extension of vacation entitlements. A substantial reduction of working time

would not only make a major contribution to increase work-life balance, quality of life and gender equality, but also has the potential for positive employment effects. The reduction of income and wealth differences, which in turn depends on a change in the balance of power, is considered as an essential prerequisite for the implementation of shorter working hours.

This assumption can be justified by the fact that strong **power and information asymmetries** prevail between consumers, on the one hand, and producers, on the other hand. As a result, consumers are externally influenced in their preference formation and restricted in their freedom of choice. It can be assumed that higher inequality further stimulates people to emulate richer classes, or to differentiate themselves from other individuals. Changes in the balance of power due to governmental regulations and incentive mechanisms, as well as the reduction of information asymmetries (e.g., by increasing awareness) constitute essential instruments for the promotion of distributive justice.

Closely related to this is the requirement to increase the **accountability of producers**, with regard to the **provision of private goods**. Key aspects here concern the improvement of product quality, which could be realized, for example, by means of the “top-runner” model. Furthermore, a stronger focus on “using instead of owning” could result into positive distributional effects, since a particular product can be used without being obliged to buy the product.

Financing of distribution policies

The effective implementation of distribution policies is always dependent on the availability of financial resources; here bottlenecks could arise, especially in periods of decreasing growth rates. To ensure the implementation of these reform options, it is also necessary to have a closer look at the respective financing options.

Regarding the **system of taxes and duties**, significant financing potentials result from changing the distribution of the tax burden. Special attention should be paid to shifting the tax burden from labor to capital, or, respectively, from income to assets. Concrete measures that are worth mentioning are, i.a., a socio-ecological tax reform, which aims to raise the taxation of resource consumption and environmental pollution, while the tax burden on labor could be reduced. To ensure the social compatibility of environmental taxes, the purpose for which the additional tax revenue will be used is of prime importance. In this regard, the implementation of a balanced tax reform could be guaranteed by additional compensatory measures, for example, property taxes, reducing non-wage labor costs or value-added taxes, or a refund in the form of an eco-bonus. In addition to a socio-ecological tax reform, considerable financing potentials also result

from an increased taxation of capital incomes, which enjoy considerable tax privileges in Austria. Furthermore, an increase in asset-related taxes, which are relatively low in Austria, seem reasonable from a redistribution perspective. In concrete terms, this could be implemented by the reintroduction of inheritance and gift taxes, an increase in land taxes and capital gains taxes, or the introduction of a financial transaction tax. Another possibility would be to increase the top income tax rate. To facilitate the implementation of the measures mentioned above, an improved exchange of information and the associated increase in transparency would be helpful. Specifically, those conditions could be created by the abolition of bank secrecy, or bilateral and multilateral measures to curb the flight of capital to tax havens.

Financing issues also arise in terms of the **redistribution of labor**. Reductions in working hours could be realized, for example, by collective agreements, and facilitated by the introduction or increase of minimum wages (especially for lower income groups). By raising wages to the extent of the productivity gains resulting from shorter working hours, the working time reduction could be implemented in a cost-neutral manner. Another way to reduce working hours are sabbaticals, which are currently common in the higher education sector; this measure also does not require any additional financing. In addition to contractually regulated working hours, it is necessary to reduce the actual hours worked, which could be achieved, for example, by increasing the social insurance contributions for overtime worked. Also relevant in this context are unpaid leaves, which however are treated with caution because of their potentially regressive distributional effects.

The provision of **public goods** and **social security** to promote distributive justice represents a significant challenge, especially in times of continuing weak growth rates. In this area, significant reforms are needed with regard to financial viability. In this context, it would make sense to reform the social security system, thereby putting a stronger focus on tax-based financing instead of the currently prevailing contributions. In this way, persons with relatively low incomes could be relieved. This goal could also be achieved by the implementation of a real progressive tax on all incomes. The latter is currently prevented especially by the regressive effects of social security contributions. An increase in the tax progression could be achieved, for example, by lowering the bottom tax rate or by increasing the “negative tax”. This could be financed by simultaneously increasing the top income tax rate. In addition, improvements in the efficiency of using public funds, which is the goal of the new Federal government budget reform, would make a valuable contribution to ensure the financing of public services. Apart from income and property taxes, the potential of consumption/excise taxes, environmental/resource taxes, and corporate taxes as sources of funding should not be neglected.

10.4 Conclusion

The Policy Paper “Growth and Distribution” deals with various aspects and challenges that arise in the context of distribution policy in times of decreasing growth rates. Particular focus is put on the distribution of income, wealth and work; besides that, aspects such as participation, social safeguarding and the provision of public goods also play a significant role.

It can be shown that distributive justice in its various dimensions is a key factor for well-being and economic stability of a society. Furthermore, it is associated with positive effects on the environment. The current distribution policy is highly dependent on economic growth. Therefore, new approaches are needed to ensure distributive justice also in times of decreasing growth rates.

In this connection, concrete policy reform options and finance opportunities arise in the area of tax and fiscal systems, the provision of public goods and the redistribution of primary incomes. Also, a substantial decline in working hours in connection with the reduction of power and information asymmetries, as well as the increase of producers’ responsibility regarding the provision of private goods could make a valuable contribution for an equitable distribution in low-growth periods.

11 Summary and Conclusions

This synthesis paper summarizes the results of nine Policy Papers dealing with the effects of slow, stagnant or negative economic growth rates on socially relevant issues. It also tries to identify solutions how best to meet these challenges. Further Policy Papers are already in preparation.

The Policy Papers depict the discussions held during the Policy-Science Stakeholder Dialogue of the initiative “Growth in Transition”, in which over 120 Experts and Stakeholders have been involved. This dialogue should contribute to increasing the sustainability of the Austrian economic system, in light of global challenges (such as resource scarcity, climate change, demographic change, etc.). In this context, specific fields of action in various policy areas are located, which need to be reshaped in the next years. In terms of sustainable development, it is about designing a new model of prosperity, which is no longer dependent on high growth rates.

The discussion of this issue is relatively new and has not yet been conducted very intensively in science and politics. Therefore, at first it was difficult to introduce this new issue in the stakeholder debates. We attempted to structure all discourses in a similar way, in order to ensure that the result, which is reflected in this summary, is as consistent as possible.

The discussions in the context of this Policy Paper series were indeed very fruitful and inspiring but have not shown a concrete, cross-thematic approach how to design a sustainable economic system for the future. Two half-day sessions of joint working and some working days for the creation of an input document and a written summary of the results may only be the first steps towards a profound change in the basic conditions of individual, economic, and political activities.

It was a particular challenge for the authors of the individual papers, as well as for the moderators of the discussions held, to satisfy the broad as well as deep expertise of about 120 participants concerning the respective topics. At the same time, an attempt was made to set a new direction, where both secure knowledge and well-established opinions are still missing.

Hence, the recommendations elaborated and the proposed measures remain relatively general in many areas. However, they point out the direction, in which society, economy and politics could evolve in order to cope with the challenges arising out of a new understanding of growth in the face of changing conditions. They reflect a mix of stakeholder inputs and expert opinions on the topic “Growth in Transition”. Additional clarifications and further research are needed here; possible contents have partly been identified during the particular stakeholder rounds.

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