Bowling all alone:

Governmental debt is associated with low social capital

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Abstract

Globalization leveraged pressure on contemporary society. One of today's most pressing societal dilemmas between generations arise from overindebtedness. In the aftermath of the 2008/09 crisis, governmental budget crises around the world led to austerity plans triggering an economic climate of stagnation, federal spending constraints and prospected social welfare decline for decades to come. Outlining the causes of the current overindebtedness crisis in the Western world prepares for an analysis of the implicit social correlates of governmental budgetary constraints. The impact of governmental austerity plans on societal well-being is discussed. Analyzing data from 20 countries of the world, World Bank Social Capital estimates are negatively related to economic public deficit spending based on Central Intelligence Agency (CIA) data. A cross-section regression holds a one unit change of social capital per capita index being related to a -.048 unit change in economic governmental deficit spending. Therefore, the higher the level of social capital in a country, the lower the likelihood of is of the government to engage in deficit spending and austerity policymaking. Innovatively outlining the relation of social capital and governmental debt is targeted at alleviating frictions arising from the up-to-date unknown negative socio-economic correlates of running governmental deficits heralding an unprecedented intergenerational equity kink. Potential overindebtedness remedies are reflected upon with a focus on the US and Europe in order to help sustain a harmonious societal climate between generations.

Key words: 2008/09 World Financial Crisis, Austerity, Debt, Deficit Spending, Financial Social Responsibility, Globalization, Overindebtedness, Social Capital, Social Responsibility, Social Welfare

1. INTRODUCTION

We live in interesting times. From the sixteenth century age of enlightenment, science and technology remarkably revolutionized the world. Followed by the eighteenth century industrialization, technological advancements, technical inventions and capital accumulation leveraged the standard of living for mankind. The post-WWII economic boom heralded golden years of socio-economic advancement and economic capital growth outpacing every measure previous ages had known.

Though looking back to an epoch of enormous economic progress in the 20th century; the improvement of living conditions seemed to be slowed from the turn of the millennium on. Emerging economic markets' noise and variance unforeseeably imposed system fragility onto society (Ayache, 2010, 2011; Black, 1986, 1989; Knight, 1999; Martin, 2002). The era of globalization, featuring complex interconnections and transactions faster than ever before in history, appeared to imply emergent systemic risks (Centeno & Tham, 2012; Derman, 2011). What happens in one part of the world today, impacts around the globe. The global interconnectedness imposing dangers creates a need for framework conditions securing from negative consequences emerging from the new web of social, ecological and fundamental transfers on a grand scale (Centeno, Cinlar, Cloud, Creager, DiMaggio, Dixit, Elga, Felten, James, Katz, Keohane, Leonard, Massey, Mian, Mian, Oppenheimer, Shafir & Shapiro, 2013; Lee, 2004). The interconnectedness also led to a globalization of risk and performativity crunches (Callon, 2006; LiPuma & Lee, 2004; Martin, 1998). Financial modeling and technological advancements drove society to risk together (Lee, 2004, 2015a; Martin, 2010).

As a consequence of complex economic interconnections, market prosperity burst with the 2008/09 monetary downturn having evolved from individual ethical failures amalgamating into collective downfalls (Martin, 2007). We now not only suffer from the painful readjustment between economic fluctuations and whimsical market movements in the

finance world (Derman, forthcoming). Market failures also having been compensated by the public results in an unprecedented overindebtedness of the Western world. Budget crises around the world led to austerity plans triggering an economic climate of stagnation, federal spending constraints and prospected social welfare decline for decades to come.

In the aftermath of the 2008/09 World Financial Crisis, the finance sector is under scrutiny as for having made fast capital at the expense of the real economy (Martin, 2010; Reilly & Brown, 2012). Since 2009 financial institutions are publicly pressured to justify their social impacts and responsibility. The destruction of assets and degrading of capital values led to a devaluation of personal property. What followed was the unorganized societal bottom-up uprising in the wake of an uncontrolled clash of realities. Distributive equity claims and the call for equality of opportunities rose in economically-troubled areas. Direct democracy protests culminated in the Occupy Wall Street movement.

People having lost trust in banking systems may have detrimental effects on the day-to-day choice and behavior society. Economic pessimism grows in the belief that the current equity imbalances will be long term and cause the next generation being worse off. Tomorrow's children may not enjoy the same standard of living as Western World economies in the eye of overindebtedness and heightened austerity demands. The long-term prospect of a declining economy and contracted social welfare state, may echo in the social cohesion within the social compound. While the impacts of the 2008/09 World Financial Crisis on economic market systems is currently under scrutiny and social responsibility claims for the finance sector are blatant (Puaschunder, 2012, 2015), the implicit societal impacts of overindebtedness in the contemporary age of austerity are unknown.

The following paper therefore describes overindebtedness and austerity (Chapter 2) and innovatively proposes a potential relation to social cohesion measured by social capital

(Chapter 3). Data is presented comprising of 20 countries[1] worldwide that shows in a cross-sectional analysis (Chapter 4.1) a negative relation of overindebtedness and social capital (Chapter 4.2). The findings are discussed and remedies proposed (Chapter 5) prior to concluding on the importance of future research on socio-economic impacts of governmental debt and austerity (Chapter 6).

2. THEORETICAL FOUNDATION

2.1 Overindebtedness

2.1.1 The offset

Economic and financial crises evolved as long as monetary systems exist. The current overindebtedness, however, is an unprecedented phenomenon resulting from conservative politics and the economic turmoil. In the last 30 years libertarian trends have led to debt accumulation (Neftci, 2000). Globalizing financial hubs dismantled taxation to attract capital from around the world (MacKenzie, 2006). Since the 1980's the finance world became detached from the real economy. Investors evaluated options based on value-at-risk (LiPuma, forthcoming). Money became a speculative good in free market economies. As bankers turned from service agents to risk hunters, risky banking overruled client services (LiPuma, 2004). Market actors were pushed to think short term and live on credit (Wosnitzer, forthcoming).

While a neo-liberal elite gained value at risk at the expense of the general populace, also societal decision making neglected future perspectives. People spent first then paid. Debt became dissociated from public shame. Borrowing overruled producing. In combination with tax income lows, nation states began to live beyond their means. National spending exhausted savings. Traditionally balanced budgets faded. Undermined financial market fundamentals and disastrous mistakes made by the finance elite led to economic

[1] Australia, Brazil, Canada, Denmark, Hungary, Israel, Italy, Japan, Mexico, Netherlands, New Zealand, Poland, Portugal, Russia, South Korea, Spain, Sweden, Switzerland, United Kingdom and the United States

imbalances and collapsing financial institutions from 2007 on (MacKenzie, Muniesa & Siu, 2007). Surreal financial assets, speculations leaping over the market and irrational goals of a fast-paced financial community opened ethical gaps between the economy and society.

The 2008/09 World Financial Crisis caused a substantial deterioration in public finance. In the aftermath of the 2008/09 World Financial Crisis, unfeasible lending business models heralded liquidity crunches (Meister & Potts, 2013). While in the Western world public debts had already started piling up around the end of the millennium, the enormous bail-outs of previous financial market exaltation in the aftermath of the 2008/09 World Financial Crisis left Western world governmental budgets highly constraint shrinking future economic prospects and social welfare opportunities.

The financial crisis caused government expenditures – especially for financial sector bail-outs – to rocket, while revenues plummeted. As sovereign debt of many nations has been rising since the 2008/09 World Financial Crisis due to bailed out banks, monetary easing and massive fiscal stimulus packages; the crisis cumulated in the willingness of politicians to abandon fiscal rules in moments of emergency (Semmler, 2013). By 2011, almost all Eurozone countries had fallen out of compliance with the Maastricht Treaty's deficit and debt restriction criteria. New regulations and treaty adjustments on governmental debt were adopted in the subsequent years featuring automatic leeway when governments deviate from budgetary targets. Rising debt levels have led many countries to fiscal consolidation and stabilization of sovereign debt levels as percentage of GDP (Blanchard & Leigh, 2013; Batini, Callegari & Melina, 2012; Baum, Poplawski-Ribeiro & Weber, 2012). The rapid debt increase in Europe heightened risk and interest costs on sovereign bonds. These high premiums caused rising borrowing costs, leading to a further rise in debt visible in Greece, Ireland, Italy, Portugal, Spain and some periphery EU countries, where the sovereign debt exploded during the recession (De Grauwe, 2011). The 2008/09 World Financial Crisis

also increased the default risk, making it harder to gain venture capital and putting pressure on banks to convey more risky frameworks – as outlined by the case of the EURIBOR/LIBOR scandal.

In the future North American banks refraining from European transatlantic investments is prospected to make the refinancing of commercial banks more expensive. In a self-fulfilling prophecy this will further shy liquidity. Combined with stricter policy programs in the Western world, impacted economic cycles will reduce the likelihood of fast and easy budget supply, potentially leading to an additional rating downgrading, making CVS and refinancing more expensive and implying hard-to-controllable institutional hesitancy to cooperate. Further triple-A rating downgrades will exacerbate austerity plans as for lowered governmental savings and heightened capital procurement costs.

2.1.2 Age of austerity

The 2008/09 World Financial Crisis heralded the social logic of derivatives (Martin, 2015). In the aftermath of the 2008/09 World Financial Crisis, governmental debt burdens led to austerity budgeting in the Western world (Shaikh, 2013). Regime dependent negative austerity multipliers resulted in financial stress with subsequent and long-term societal impacts. An austerity driven reduction in spending had negative effect on consumption, output, employment, and investment, feeding a downward spiral (Semmler, 2013).

Austerity induces recession-like effects on economic growth destabilize nation states (Lawson-Remer, 2013; Marglin & Spiegler, 2013; Proaño, 2013). In the aftermath of the 2008/09 World Financial Crisis, austerity measured bred inequality leading to welfare losses and extreme decreases in workers' wages throughout Europe and the US. The strong downward effect caused high unemployment, more financial stress in the financial sector with increased credit and bond spreads, banking risks and falling internal and external demand. During this period of increasing financial stress and budget consolidation policy,

the EU monetary union using the same currency, led to weaker countries being unable to devalue their own currency, which might have stimulated their economies by increasing exports and debt repayment burden easing (Semmler, 2013). Nations having no national central bank that can control the monetary policies of sovereign nations or a sufficient deposit insurance that might calm people who fear a banking collapse in the Eurozone, led to countries' downward pressure on wages. Unprecedented credit expansion and active monetary policy resulted in fixed-rate, full allotment of liquidity of banks on demand on its leveraged investment positions. Longer term refinancing operations were targeted at reducing uncertainty and to encourage banks to provide credit to the economy (Semmler, 2013). Austerity triggered a strong contractionary multiplier in Greece. Greek public consumption fell by 9.1%, which caused investment to plummet by 20.7%, imports by 3.4%, private consumption by 7.1%, and the aggregate demand by 7.1% (Semmler, 2013). Greek real wages fell by more than 30% since 2009, inflicting damages on living standards and social cohesion (Semmler, 2013).

Austerity cuts in the Eurozone have led to reductions in overall output in excess of the total level of spending cuts (Stein, 2011). Austerity policies caused more recession, increasing the negative output gap and the gap between potential and actual GDP while reducing salaries of public employees. Austerity caused the actual deficit-to-GDP ratio to stay high, which heightens unemployment. As the cost of sovereign debt increases, this adds to budgetary deficits (Semmler, 2013). These reductions in consumption and spending were not offset by higher private investment (Semmler, 2013). The recession grows worse as public investment and consumption expenditures fell, bargaining agreements were changed, and public sector wages, unemployment payments and pension benefits fell. Austerity economics weaken political will and economic policy with a bias towards making inequality worse due to austerity-driven social cuts essential to providing public service (Aja, Bustillo,

Darity & Hamilton, 2013; Howell, 2013; Pollin, 2013). Unbalanced income and wage adjustments met varying resistance in different countries such as widespread street and activist calls to default on public debt rather than suffer further social costs of austerity (Semmler, 2013). The massive amount of expenses not only implies further economic turmoil and monetary instability but also trades off from social equity and fair resource distribution. As the problem appears as a long-term crisis, unemployment will rise, individual prosperity decline and social welfare standards continue to degrade. Socio-economic problems arise in the wake of governmental social welfare provision cuts.

2.1.3 The socio-economic impacts of debt and austerity

The social costs of the 2008/09 World Financial crises and subsequent austerity correlates are widespread, immediately visible in social welfare cuts steering civic upheaval. Yet financial market downturns also impact intergenerational balance by a long-term spiral of overindebtedness that will have to be paid back by generations to come. The current account and capital account twin deficit burdens on the upcoming youth. For instance, a US child inherits 55,000 USD debt at birth and a US taxpayer owes more 150,000 USD share of governmental debt with trends predicting a further exacerbation of the US debt. In the eye of our children having to pay for our current economic recovery, we are now taking from future generations. The debt burden gains weight in the Western world given the societal trend of a shrinking Western world population. Putting the elders' current pension consumption paycheck into the child room is problematic as pensions are usually not allocated towards future investments – such as infrastructure or education, which would build future societal assets in the long run and make future generations richer (Puaschunder, 2015). The young will experience equity downgrades in their investments – such as housing market drops – but also heightened unemployment.

Not only do we live at their expenses, the youth also not quite has the same opportunities as their parents enjoyed. Rising prices take away wealth accumulation prospects and austerity plans diminish access to social welfare. Transferring debts into the future will sustainably lower future generations' access to education and social welfare. Missing budgetary resources result in governmental education cuts, therefore European students now have to pay for their tuition while generations before were granted free access to knowledge and in the US the education bubble inflates as rising tuition costs skyrocket to unprecedented momentum. 'Born poor, die poor' becomes reality in the Western world and an intergenerational mobility constraint. The societal outcomes are crucial to the people who experience hope for a better future through education opportunities vanishing. Restricted access to education breeds social unrest. The contemporary debt burdens are thus likely fueling political frictions and psychological crises due to unprecedented pressure on civilians.

While the economic impacts of austerity are well known, what the overall climate of overindebtedness means for society long-term and the lasting social interactions and intergenerational transfers remains unknown (Puaschunder, 2015). While the public debt problem trades off from the international sovereignty of countries, the responses to the 2008/09 World Financial Crisis differ throughout the world – for instance, neo-liberal and post-Keynesian European economies invested in social welfare to avert the negative impacts of liquidity constraints on the populace nurture equality and long-term financing. Due to the manifold post-2008/09 World Financial Crisis remedy strategies as well as different societal dimensions austerity touches on, an overall pattern of socio-economic correlates related to overindebtedness is missing.

With reference to the beginnings of economic activities in gift giving cultures; financial market activities may still today echo in socio-economic societal trends (Appadurai, 2015; Bourdieu, 1997; Bourdieu & Nice, 1990; Emerson, 1844/2005; Hubert & Mauss, 1925;

Mauss, 1925; Mauss, 1925/1990). Given the very many different social welfare expenditure opportunities that are curbed in the age of austerity including, for instance, national health, education, pensions and infrastructure, an overall social mood and societal climate is expected to be associated with overindebtedness and austerity. The performativity of capital may be related to societal anthropology (Lee, 2015b). Austerity and overindebtedness may directly impact our social habits, ethics and societal rituals (Simmel, 1971; Tambiah, 1981; Weber, 1905/2002).

2.2 Social capital

Social capital refers to the collective value of social networks and the inclinations that arise from these networks to cooperate and enable collective action (Putnam, 2001). Economic and cultural assets of social networks form social capital, in which transactions are marked by high degrees of reciprocity, trust and cooperation. Market agents contribute to a common good in tangible and intangible ways. Social capital improves the social performativity of groups, fosters growth of entrepreneurial firms, superior managerial performance, enhanced supply chain relations, strategic alliances, and the evolution of communities.

Social capital comprises of five dimensions: (1) Groups and networks as collections of individuals that promote and protect personal relationships which improve welfare; (2) Trust and solidarity as elements of interpersonal behavior; (3) Collective action and cooperation as the ability of people to work together toward resolving communal issues; (4) Social cohesion and inclusion to mitigate risk of conflict and promote equitable access to benefits of development by enhancing participation of the marginalized as well as (5) Information and communication to improve social discourse and grant access to social knowledge.

Social capital encompasses institutions, relationships, and customs that shape the quality and quantity of a society's social interactions.[2] As a critical prerequisite for societies to prosper economically and sustainably, social capital improves effectiveness and longevity of communities and their ability to work and function efficiently together. Social capital allows addressing common needs in the social compound fostering greater inclusion and cohesion as well as increased transparency and accountability.

Given the widespread societal reach of austerity implications in the wake of overindebted governmental budgets, a relation of overindebteness and social capital is hypothesized insofar as *the more overindebted a country is, the lower social capital is* (*Hypothesis*).

3. EMPIRICAL STUDY

The following empirical study targets at delineating the relation of social capital and overindebtedness. As dependent variables, social capital will be investigated in relation to the level of overindebtedness. In a cross-sectional regression, the difference between overindebtedness relation to variant levels of social capital will be investigated. Variance in governmental debt among different countries are hypothesized to be associated with different social capital degrees.

3.1 Hypothesis

The study explores the relation between nationally-differing debt levels and corresponding social capital. It is hypothesized that the *higher the nationally-differing debt level, the less social capital a country is going to have.*

3.2 Method

3.2.1 Operationalization

[2]http://web.worldbank.org/WBSITE/EXTERNAL/TOPICS/EXTSOCIALDEVELOPMENT/EXTTSOCIALCAPITAL/0,,contentMDK:20642703~menuPK:401023~pagePK:148956~piPK:216618~theSitePK:401015,00.html

As independent variable, economic public burden sharing is measured by public deficit spending. Information on public national budgets were retrieved from the Central Intelligence Agency (CIA) World Factbook.[3] The budget deficit information was then related to the overall budget by calculating a country's total revenues minus the country's total expenditures, divided by revenues and the overall term multiplied by 100. The equation of this procedure reads $(\frac{r-e}{r})*100$, whereby r=total country revenues and e=total country expenditures.

As dependent variables, social capital is estimated by public sector World Bank Social Capital Index reporting (García, Martínez & Radoselovics, 2008).

3.2.2 Research design

The sample includes the 20 world countries Australia, Brazil, Canada, Denmark, Hungary, Israel, Italy, Japan, Mexico, Netherlands, New Zealand, Poland, Portugal, Russia, South Korea, Spain, Sweden, Switzerland, United Kingdom and the United States. The statistical hypothesis testing employs a cross-section regression to outline differences between country-specific levels of overindebtedness in relation to social capital. Find the preliminary, exploratory research plan in table 1.

Table 1: Research plan

Research Plan	
IV	**DV**
Cross-sectional regression: Relation of public deficit spending and social capital	
Public deficit spending per GDP • Public national budgets	**Social capital** • World Bank social capital index

3.3 Results

[3] https://www.cia.gov/library/publications/the-world-factbook/

The sample includes 20 countries (see data and variable description in the appendix). As a conceptual variables check, a highly significant correlation of $r_{Pearson}(78)=.981$, $p < .000$ between social capital per capita index and social capital volume index was found.

The model employs a cross-sectional regression (see SPSS output in appendix). The regression describes the relation of social capital and overindebtedness. The regression coefficient B value of -.048 for the social capital per capita index is significant at the 5 percent one-sided t-testing level, with a p value of 0.097/2=0.0485. A one unit change of social capital per capita index is related to a -.048 unit change in economic governmental deficit spending. The regression reveals a weak fit with an R square of .182 and adjusted R square of -.036. The Durbin-Watson is 2.510, which indicates a slightly negative serial correlation, with N=20, k=2, d_L=1.100, d_U=1.537. The calculated Durbin-Watson value of 2.510 is in the zone between the range d_U=1.535 and 4-d_U=2.900. We therefore do not reject H_0, indicating no serial correlation based on the Durbin-Watson Test table. Based on the correlational analysis and the SPSS multicollinearity test, that detects multicollinearity if tolerance is below .1 and VIF greater than 10 or on average much greater than 1, the problem of multicollinearity does not exist. Heteroscedasticity will be tested in SPSS by the Levene Test, which tests the null hypothesis that the variances of the comparison groups are the same. The output probability is the probability that at least one of the samples in the test has a significantly different variance. If this is greater than the 5% significance level, then it is considered too great to be able to usefully apply parametric tests (Gujarati & Porter, 2009; Hill, Griffiths & Lim, 2012).

4. DISCUSSION

Based on the results of regressions comprising data from 20 countries, deficit spending countries are lower on social capital than those whose public leaders pursue a more balanced budget approach. Overindebtedness is thus associated with social effects. Running

governmental debt and the subsequent austerity plans may wear down social cohesion or be more likely if society has a lower social cohesion.

In a critical reflection of the current results, we may hold that while the study design may have its merits with capturing 20 countries in the first investigation of international differences in intergenerational macroeconomics, at the same time, the methodology is bound by limitations of regressions, a fairly small sample size and low beta regression coefficient (Gujarati & Porter, 2009; Hill et al., 2014).

Prospective future research may therefore add by employing stringent hypotheses testing in order to outline the detected directionalities, but also shed light on drivers and boundary conditions of the link between governmental debt and social capital. As a future research perspective, analyzing present public and private sector social capital drivers could help the implementation of intergenerational justice. In addition, future research could capture if public sector contributions are associated with public social capital and private sector contributions associated with private social capital transfer. Even further investigations could then scrutinize if public and private sector social capital transfers are inversely related (crowding out) or can lead to complementary benefits. Additional time series research could target at differentiating between benefit and cost transfers from generation to generations capturing variance between intergenerational benefit transfer and intergenerational burden sharing in the triple bottom line domains.

5. CONCLUSION

Overall the presented research contributes to the emerging discourse on overindebtedness by integrating social correlates into macroeconomic growth paradigms (Solon, 1992). In response to the economic downturn, nations experimenting with austerity restricting public spending has shown to have detrimental socio-economic correlates and impacts on society. Curbing essential government spending on education, social welfare,

public safety, retirement, health, and infrastructure not only slows economic activities but obviously has critical social correlates. The implications of the provided research are manifold.

Theoretically the findings support socio-economic research on overindebtedness in order to support the heterodox economics idea of social correlates of economic parameters. Taking a heterodox perspective on debt provides a real-world relevant contemporary snapshot of intergenerational imbalances around the globe. *Empirically* the results offer a first introduction of a collective socio-economic shadow of overindebtedness by elucidating intercultural and national intergenerational equity differences regarding overindebtedness and the impact of debt crises on society. *Practically* the findings present an important descriptive case of contemporary socio-economic intergenerational imbalances and real-life influence factors on public and private sector social capital in the eye of overindebtedness. Capturing social facets of overindebtedness allows to dynamically display societal trade-offs of debt in order to provide avenues for harmoniously integrated intergenerational fairness solutions (Harrod, 1948). The results enable recommendations for public and private economic leadership on fiscal discipline. The novel insights gained offer ways how to avert social frictions arising from austerity plans diminishing social welfare standards. Overall, the paper may offer solutions how to harmoniously implement intergenerational equity in order to create a socially-favorable climate over time following the greater goal of harmony between generations (Auerbach, Gokhale & Kotlikoff, 1991, 1994; Foley, 2009).

As outlined by the results, overindebtedness causes inevitable socio-political conflicts in the aftermath of bail-out plans. The cure for a rise in social capital lies in averting further debt and austerity. While the detected impacts may thus be of socio-economic nature, the remedies may comprise economic and political facets. Action on overindebtedness relief will feature multi-layered decision making processes.

On the international level, debt stabilization depends on complex regimes and the economic environment as described by financial stress, the vulnerability of the banking system, monetary policy and the state of internal and external demand, and exchange rates among various other factors. The level of aggregate expenditures and taxes are relevant as well as the composition of spending and taxes – if government money spending is on health, education, infrastructure, wages and salaries in the public sector, then the multiplier will trigger positive long run effects (Semmler, Greiner, Diallo, Rajaram & Rezai, 2011; Stein, 2011).

Within the Eurozone, European leaders, who had agreed upon the Euro as a common currency, now find themselves in a situation of asking who decides the fiscal policy in bail-outs and why was there no codification of default strategies and burden sharing clause in the inception of the Eurovision to lead in the Eurozone bail-out plans now? Banks are by now more likely to invest in international entities – foremost the European Central Bank – than inter-bank lending, especially after the 2012 EURIBOR/LIBOR scandal. The European monetary union stabilization pushes a regulatory Eurozone harmonization in order to ensure price and financial market stability. The Eurobonds solution as a major political leap forward of the European Union could have grand but mostly unforeseeable implications for the entire Eurozone that will leap over to other Western world market economies. An opening abyss of national monetary rescues and central banks dictating the Euro-bail-out project currently raises political tension coupled with nationalism and Eurozone fatigue.

Given the results' evidence for overindebtedness having negative social correlates and austerity deepening societal inequality and heightening the tensions and contradictions inherent in capitalist economies (Dymski, 2013), austerity in the wake of debt as a cure appears worse than the disease (Aja et al., 2013; Semmler, 2013). Austerity plans that have been enacted too fast may plunge countries into worsening unemployment, poverty and

growing civil unrest, which may lead to ever lower levels of social capital. Therefore uncontrolled distributional effects that can endanger the future of the welfare state should be revised (Boyer, 2012). In particular, social spending on the elderly hurts young people if retirement and elderly health care spending takes funding away from investments supporting education and youth development (Ghilarducci, 2013). Support from spending on the elderly and the young are thereby seen as complements.

Future prospects are hard to estimate as for being directly influenced by the overall economic growth rate. Future generations may sustainably be burdened due to our current short-term expenditures and debt repayments. Our current indebtedness overrules economic growth and directly transfers debts into the future – estimated 60% debt of GDP will be 90% of the GDP in ten years with long term implications for the real economy and society. Some countries already face over 80% debts of the GDP that will have to be paid back by – at least – the next two generations. When debt rises faster than economic output, higher taxation levels are viciously coupled with a lower range of governmental degrees of freedom to provide social services heralding challenging governmental-citizen relations and looming an even larger social capital decline.

In the eye of these unprecedented intergenerational equity imbalances, it has become economically efficient to think about long-term social capital drawbacks from a socio-political angle. Nowadays, intergenerational equity has become a political question of how far democracy goes and temporal justice an ethical obligation for the future. As a remedy, economic stimulus is needed to restore growth and foster social cohesion. Policies should focus on economic opportunity and strengthen the middle class to stabilize democracy and social care (Lawson-Remer, 2013). Potential policy options include increasing tax revenues for social and infrastructure spending – e.g., through taxing top-income earners (Piketty, Saez & Stantcheva, 2011; Washington Post, 2013). Policies that reduce risk for borrowers and

lenders through governmental loan guarantee programs. Raising the costs for capital hoarding can restore trust in the economy and stimulate economic activities. Government expenditure may have a lasting positive impact on output, employment and real wages as well as labor productivity. In addition, Financial Social Responsibility will ensure that the current generation is not spending the money of tomorrow's children or takes up debt to be paid by future children (Puaschunder, 2012). Long-term debt reduction should be enacted slowly with mild effects on society. Alongside, governments must breed hope through forward looking strategies in the eye of austerity cuts and unemployment gaps to take away people's fear of the future. Policy makers are pressured to revise social services and raise the retirement age in industrialized economies. The balance between the welfare of present and future generations can also be established through spontaneous and individual saving decision of the present generation as well as policy implementations to arrange tax collection and governmental actions affecting the economy to elicit saving preferences in favor of future generations (Bauer, 1957). Society can use intergenerational fiscal transfers to allocate the burdens across generations without the need to trade off from generation's well-being for another's (Sachs, 2014). Generations passing on to the future will feature age-attentively redistributed wealth, investments for young and respect for future generations' resource consumption needs. With shedding light on the unknown link between governmental debt and social capital, this article pursued to ensure constancy of a socially beneficial climate for this generation and the following.

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Regression

Descriptive Statistics

	Mean	Std. Deviation	N
Economic_government_deficit_spending	-8.3989	9.98878	20
Social_Capital_Per_Capita_Index	163.0160	90.37128	20
CSR_Rate_of_Responsibility_Reporting	70.9000	18.58664	20
Expenditure_public_educational_institutions_as_percent_of_GDP	5.4750	.89259	20
House_Future_Orientation_Practices	3.9280	.50194	20

Correlations

		Economic_government_deficit_spending	Social_Capital_Per_Capita_Index	CSR_Rate_of_Responsibility_Reporting	Expenditure_public_educational_institutions_as_percent_of_GDP	House_Future_Orientation_Practices
Pearson Correlation	Economic_government_deficit_spending	1.000	-.418	-.043	.006	.063
	Social_Capital_Per_Capita_Index	-.418	1.000	.111	.182	-.045
	CSR_Rate_of_Responsibility_Reporting	-.043	.111	1.000	-.122	.406
	Expenditure_public_educational_institutions_as_percent_of_GDP	.006	.182	-.122	1.000	.320
	House_Future_Orientation_Practices	.063	-.045	.406	.320	1.000
Sig. (1-tailed)	Economic_government_deficit_spending	.	.033	.429	.490	.396
	Social_Capital_Per_Capita_Index	.033	.	.320	.222	.425
	CSR_Rate_of_Responsibility_Reporting	.429	.320	.	.305	.038
	Expenditure_public_educational_institutions_as_percent_of_GDP	.490	.222	.305	.	.085
	House_Future_Orientation_Practices	.396	.425	.038	.085	.
N	Economic_government_deficit_spending	20	20	20	20	20
	Social_Capital_Per_Capita_Index	20	20	20	20	20
	CSR_Rate_of_Responsibility_Reporting	20	20	20	20	20
	Expenditure_public_educational_institutions_as_percent_of_GDP	20	20	20	20	20
	House_Future_Orientation_Practices	20	20	20	20	20

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.427[a]	.182	-.036	10.16747	.182	.835	4	15	.524	2.510

a. Predictors: (Constant), House_Future_Orientation_Practices, Social_Capital_Per_Capita_Index, Expenditure_public_educational_institutions_as_percent_of_GDP, CSR_Rate_of_Responsibility_Reporting

b. Dependent Variable: Economic_government_deficit_spending

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	345.077	4	86.269	.835	.524[b]
	Residual	1550.662	15	103.377		
	Total	1895.739	19			

a. Dependent Variable: Economic_government_deficit_spending

b. Predictors: (Constant), House_Future_Orientation_Practices, Social_Capital_Per_Capita_Index, Expenditure_public_educational_institutions_as_percent_of_GDP, CSR_Rate_of_Responsibility_Reporting

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients			95.0% Confidence Interval for B		Correlations			Collinearity Statistics	
		B	Std. Error	Beta	t	Sig.	Lower Bound	Upper Bound	Zero-order	Partial	Part	Tolerance	VIF
1	(Constant)	-7.015	21.057		-.333	.744	-51.897	37.867					
	Social_Capital_Per_Capita_Index	-.048	.027	-.433	-1.770	.097	-.106	.010	-.418	-.416	-.413	.911	1.098
	CSR_Rate_of_Responsibility_Reporting	.005	.147	.010	.036	.972	-.308	.319	-.043	.009	.008	.729	1.371
	Expenditure_public_educational_institutions_as_percent_of_GDP	.911	2.987	.081	.305	.765	-5.455	7.277	.006	.078	.071	.766	1.306
	House_Future_Orientation_Practices	.270	5.682	.014	.048	.963	-11.840	12.380	.063	.012	.011	.669	1.495

a. Dependent Variable: Economic_government_deficit_spending

Coefficient Correlations[a]

Model			House_Future_Orientation_Practices	Social_Capital_Per_Capita_Index	Expenditure_public_educational_institutions_as_percent_of_GDP	CSR_Rate_of_Responsibility_Reporting
1	Correlations	House_Future_Orientation_Practices	1.000	.201	-.437	-.496
		Social_Capital_Per_Capita_Index	.201	1.000	-.262	-.216
		Expenditure_public_educational_institutions_as_percent_of_GDP	-.437	-.262	1.000	.330
		CSR_Rate_of_Responsibility_Reporting	-.496	-.216	.330	1.000
	Covariances	House_Future_Orientation_Practices	32.281	.031	-7.421	-.414
		Social_Capital_Per_Capita_Index	.031	.001	-.021	-.001
		Expenditure_public_educational_institutions_as_percent_of_GDP	-7.421	-.021	8.920	.145
		CSR_Rate_of_Responsibility_Reporting	-.414	-.001	.145	.022

a. Dependent Variable: Economic_government_deficit_spending

Collinearity Diagnostics[a]

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions				
				(Constant)	Social_Capital_Per_Capita_Index	CSR_Rate_of_Responsibility_Reporting	Expenditure_public_educational_institutions_as_percent_of_GDP	House_Future_Orientation_Practices
1	1	4.747	1.000	.00	.01	.00	.00	.00
	2	.184	5.074	.00	.91	.01	.00	.00
	3	.051	9.632	.01	.00	.58	.11	.00
	4	.010	21.445	.40	.03	.31	.86	.10
	5	.007	25.949	.58	.05	.10	.03	.90

a. Dependent Variable: Economic_government_deficit_spending

Residuals Statistics[a]

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	-18.5536	-2.1364	-8.3989	4.26168	20
Residual	-16.76203	15.78482	.00000	9.03404	20
Std. Predicted Value	-2.383	1.469	.000	1.000	20
Std. Residual	-1.649	1.552	.000	.889	20

a. Dependent Variable: Economic_government_deficit_spending