REIMAGINING PROGRESS: DEGROWTH AND WELL-BEING IN REGIONS IN EUROPE
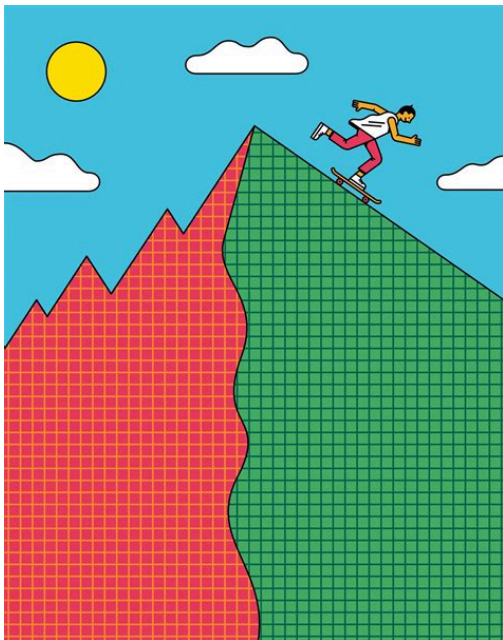
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Bachelor's Thesis

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Abstract

Climate change and socio-economic inequalities pose significant threats to life on Earth, with the pursuit of GDP growth often exacerbating these issues. Exploitation of resources and environmental damage in the name of capitalist expansion have impacts on the well-being of the planet and humans. This thesis explores degrowth as a potential solution to these challenges, focusing on its impact on regional well-being and happiness in Europe by exploring how and to what extent degrowth influences well-being. By analysing statistical correlations between degrowth principles, GDP growth rates, and happiness, this study suggests that the drive for economic growth for its own sake may hinder happiness more than economic decline itself. The findings suggest that GDP is an inadequate measure of well-being, as regions with higher GDP growth do not necessarily exhibit higher happiness levels. This study advocates for further research on degrowth policies to provide a framework for transitioning from a GDP-centric model to more sustainable socio-economic systems that prioritise human and environmental well-being.

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1. __Introduction__

Climate change and socio-economic inequalities stemming from the global climate crisis are increasingly making headline news. Natural disasters are becoming more and more common and are threatening almost all regions of the globe (Expert Group On Global Climate Obligations, 2015). High levels of CO_2 emissions are worsening greenhouse effects and overall human activity is polluting our air, soils, and waters. The climate crisis has turned into a climate emergency, with its consequences being felt already and being likely to worsen if there is no stark, immediate intervention (Expert Group On Global Climate Obligations, 2015). Climate change's root causes, namely overproduction and overconsumption, are ultimately clashing with the finite resources of our planet (ultra-passing planetary boundaries), resulting in emissions and pollution, and turning our climate and the safe ecological operating space of humanity ever more hostile (Seidl & Zahrnt, 2022), all while widening the gap between those who can afford to mitigate these effects and those who cannot (Taconet, 2020).

Indeed, regional and/or national inequalities in societal capacities to respond to a changing world are increasing. The rift between economically well-off places and socio-economically weakened regions is widening, both within and among countries worldwide (Rodríguez-Pose, 2019). With a lack of opportunity and declining employment rates, deprived regions are often left behind in terms of policy and investment (Rodríguez-Pose, 2019). This may lead to discontent and frustration towards political institutions, politicians, and political movements/parties. Left-behind regions, often referred to as 'places that don't matter' (Rodríguez-Pose, 2019), are more likely to vote for populist parties, representing a systemic risk and threatening the establishment of radical, demagogue political forces and with the potential for provoking political instability. These factors seem to be correlated with geographies of discontent (Dijkstra et al., 2019) and are well documented within the corresponding literature. The rise in populism coupled with economic decline is often an indicator of low well-being and happiness (Rodríguez-Pose, 2019).

Similarly, socio-territorial inequalities are enhanced by the effects of climate change (Harlan et al., 2015). Marginalised regions are often exposed to more pollution and environmental degradation due to economic factors such as low prices of land and socio-political discrimination in decision-making (Harlan et al., 2015). The 'regions left behind' may be subjected to the political principle of "the path of least resistance" (Harlan et al., 2015) where authorities authorise polluting industrial facilities on marginalised regions because they expect little resistance. Thus, environmental degradation is experienced unequally over different regions rendering some regions more vulnerable to climate change and other environmental threads than others. This goes hand in hand with the fact that these socio-economically weakened regions can often not respond with adequate adaptive capacity due to a lack of resources (Thomas et al., 2018). As the inequalities experienced by these regions are felt on an economic level, they face financial obstacles to adopt new technology that mitigates the consequences of climate change. This deepens the existing gap between rich and poor regions and strengthens the link between climate change and socio-economic inequalities and injustice. Territorial inequalities appear to be paralleled with environmental degradation and consequent political shifts. Various studies have found correlations between places experiencing decreasing well-being and economic decline linked to territorial inequalities. There might be an entanglement of unhappiness, environmental degradation and economic decline that is geographically bound. Could the roots of these trends be identical? Could one fuel the other and how can they be tackled at the same time? Indeed, the interlinkage between climate change and inequalities is the subject of numerous scientific investigations. It is increasingly becoming apparent that tackling the roots of these interrelated issues (Taconet, 2020) is a priority in academic research and policies.

For this research, I will focus on how the main indicator of capitalism, GDP, and its inherent growth-oriented trait may be at the root of the above-mentioned problems. Capitalism as the global economic system under which society functions provides a framework through which it is possible to analyse climate change and inequalities. Capitalistic production is generally measured by the Gross

Domestic Product (GDP). However, inequalities, unhappiness and climate change are not accounted for in GDP measurements. While GDPs keep rising, regional well-being and welfare are dropping. GDP as a measurement tool seems to be flawed in accounting for economic prosperity at the expense of well-being and happiness.

Why, then, are politicians striving for permanent GDP growth if it does not guarantee well-being? In his 1968 speech, Robert Kennedy conveyed the same message: 'GDP measures neither our wit nor our courage, neither our wisdom nor our learning, neither our compassion nor our devotion to our country… it measures everything, in short, except that which makes life worthwhile.' (Hickel, 2020, p.156).

Hence, this study aims to introduce degrowth as an economic and social system that deflects from GDP as a measure of happiness. Within the degrowth framework, there is space for a paradigm shift that could mitigate the environmental degradation and decreasing well-being taking place in the name of capitalist production (Parrique, 2019) and GDP growth. On a societal level, diving into alternatives to a capitalistic society and economy could be relevant in the face of ongoing global challenges. With economic growth as a driving force, capitalism has widened inequalities and provoked irreversible environmental damage as a consequence of its functioning (Pillay, 2019). Exploring options such as degrowth could provide a change in paradigm able to sustainably counteract the negative effects of capitalism and mitigate the backlash of a growth-oriented economy, while promoting a healthy environment and equality.

In light of the above-mentioned challenges, there may be a link between the capitalistic paradigm and decreasing well-being as a result of climate change and inequalities. The main purpose of my research is to explore, analyse and evaluate how and to what extent alternatives to capitalism can influence the well-being of regions in Europe. More specifically, I will focus on how the principles of degrowth could serve as a viable and fruitful option to mitigate climate change and inequalities. Furthermore, I want to find out whether the capitalistic paradigm of GDP growth is hindering the happiness and wellbeing of regions in Europe. My research will aim at analysing what the origins of decreasing happiness in these 'places left behind' (Koeppen et al., 2021) are and how degrowth policies could mitigate the negative effects of a capitalistic turning wheel potentially impeding these regions from thriving. I spatially limited my research to European countries in order to include the rich literature on discontent and eventually propose solutions viable within the European framework.

I aim to answer the following question: To what extent does the implementation of degrowth principles influence the well-being of regions in Europe? Secondary questions include whether the implementation of degrowth principles is a suitable policy measure for socio-economically weakened regions.

In the following, I will discuss the theoretical framework within which this research will take place. I will delve into the different concepts and theories backing my research such as well-being, degrowth and GDP growth. Then I will explain and justify the applied methodology before illustrating the results obtained through a statistical analysis. Finally, I will conclude with a discussion and future outlooks.

2. <u>Theoretical framework</u>

a. Capitalism, GDP Growth and Material Well-being

Various studies are showing how the current-day challenges relate back to capitalism (Hickel, 2020; Parrique, 2019; Amin, 2020). Capitalism as a politico-economic system emerged during the Industrial Revolution in the 19th century and has since been established as the hegemonic way of life in Western or westernised societies (Amin, 2020). It has rapidly become the basic law that governs modern society. Under this economic system, there has been a continuous accumulation of capital resulting in

increased Gross Domestic Product (GDP). GDP measures "the total value of goods and services produced and exchanged for money within a specific region (e.g., a country) during a specific timeframe (e.g., a quarter). It encompasses private consumption, government spending, investments, and net exports" (McInerney et al., 2023 p.1). GDP has since been used and adapted to become the measurement tool of societal well-being and its growth was seen as synonymous with prosperity (Hicket & Sullivan, 2023). Material well-being resulting from a rise in GDP was equalled to happiness and considered a success of capitalism. Happiness and well-being are hereby defined as 'the subjective enjoyment of one's life as a whole, also called 'life satisfaction' (Veenhoven, 2017, p.1), where life satisfaction is closely related to material well-being. The higher material consumption, the higher well-being. In a capitalistic society, growth, especially economic growth, is associated with success seeing as that has historically enriched its beneficiaries materially.

Thus, well-being and happiness on a regional level have been associated with and measured by economic growth or GDP as well (McInerney et al., 2023). GDP as a measure for increased economic spending is associated with better health, education and material consumption. In the neoliberal economy, the degree of economic expansion was believed to reflect the well-being of individuals based on the assumption that consumption opportunities and functional consumer-producer relationships were measurements of well-being (Andreoni & Galmarini, 2013).

Following this logic, in a declining economy, where GDP has decreased, well-being is considered to diminish as well. Various studies have shown how frustration stemming from economic decline and feelings of being 'left behind' are often coupled with GDP decrease (Zarko, 2022). As such, regions that are experiencing 'left behindness' have failed to maintain a growing GDP rate and are thus encountering decline on societal and economic levels. The consequences of the latter are visible in reactionary voting behaviour (Rodriguez-Posé, 2019) in these regions left behind and deepen territorial inequalities.

b. Flaws of GDP and Capitalism

Thus, scholars and thinkers have voiced their critiques on capitalism and GDP since its early days.
On one hand, Marx was already identifying that this exponential accumulation of capital was destructive for both humans and the environment (Amin, 2020). The way our economy is organised requires constant growth, thus, depleting natural resources. Seeing as capitalist production revolves around the extraction of primary resources that are physically finite, this system will eventually encounter an impasse. In his article, Koch (2018) describes that "the ecological crisis and the increase in social inequality are basic features of high-consumption capitalism" (p.38). The economic system has reached or is exceeding planetary boundaries (Seidl & Zahrnt, 2022). The "unsustainable link between resource consumption and economic growth" (Loewen, 2022) as an inherent trait of capitalism drives the economy and society into a dead-end. These consequences are closely linked to GDP growth that is procured by countries and regions. In order to comply with the rise of GDP that is demanded within the capitalist framework, regions are forced to consume more and more resources and are thus harming the environment in their pursuit for higher GDPs.

On the other hand, alongside the environmental damage, capitalism also has a psychological effect on individuals. In his article, Butler (2018) explains how the 'socialisation processes' of a capitalist society influences well-being on different levels and contributes to alienation and instability in personal lives. He states that 'the individualistic and materialistic orientations of [advanced capitalistic] cultures are believed to contribute to people's difficulties forming stable bonds in these societies' (Butler, 2018, p. 202) which decreases well-being and happiness. Within this economic mindset, individualistic traits push social bonds and community to the margins. Furthermore, competition, materialism and market-driven identities are proven to impact individual well-being, resulting in frustration and thus, influencing voter behaviour into radical, demagogue politics (Butler, 2018; Kawabata, 2023). This individual unhappiness is then aggregated to the regional level, resulting in radical voting outcomes which in turn create geographies of discontent and regional inequalities.

All of the above is not measured nor accounted for in GDP measurements. While regional GDPs keep rising, well-being and happiness on regional levels are dropping. GDP and well-being and happiness are not growing parallelly. Thus, recent studies have shown that GDP as a measure for well-being is incomplete in terms of quality (Parrique, 2019; McInerney et al., 2023). If GDP measures the quantity

of employment for example, it might not reflect the decency of the jobs, thus, skewing the statistics about well-being. Moreover, happiness levels have not increased parallelly to the growth in consumption experienced since the 1960s (McInerney et al., 2023). This critique is further supported by the Easterlin paradox (Easterlin, 2021). This concept describes how happiness varies directly with income, but over the long-term, increase in happiness and income are no longer related. Seeing as GDP captures income (McInerney et al., 2023), there could be a cap in GDP after which happiness and GDP do not grow parallelly any longer. Thus, these observations called for a revaluation and redefinition of well-being within academia and policy.

c. Well-being redefined

As such, well-being has been rebranded as a 'goal of socio-economic ideas' (McInerney et al., 2023), detering from GDP as a relevant proxy for well-being. This definition emerged from the realisation that individual well-being is not isolated and is in fact intrinsically connected to external factors. McInerney et al. (2023) explain how well-being is a "pluralist achievement" influenced by "other living things and even the environment" (p.1). In that sense, harming the environment also harms individual well-being which supports the link between plummeting well-being and climate change as a consequence of GDP growth. Growing GDP as a proxy for capitalist expansion and its damaging effects on the environment is thus decreasing well-being following this logic. Environmental degradation leads to feelings of frustration and discontent as well as anxiety which are heavily related to regions left behind. In other words, if a community and the environment are not happy, the individual will not be happy either. This individual unhappiness is then reflected on a regional level and results in clusters of geographies of discontent. McInernery et al. (2023)'s new holistic view has also incorporated community and social ties as predictors of well-being. Including social bonds as an indicator for happiness could fuel the argument that GDP does not measure happiness adequately.

d. Degrowth as a possible antidote

Following this stream of thought, a concept has emerged to integrate both the planet's well-being and that of humans. Degrowth is an up-and-coming school of thought "born out of a disappointment [to] socially existential questions" (Parrique, 2019 p.165). It represents an emancipatory movement against capitalism, and economic growth, providing a framework in which environmental and socio-economic well-being can thrive rather than grow. Degrowth proposes to rescale "the economic system to fit within the biophysical limits of the planet" (Andreoni & Galmarini, 2013, p.1) by enhancing human well-being and ecological conditions. Its main values are among others autonomy, sufficiency, and care (Parrique, 2019) alongside resilience, participation, and social justice (D'Alisa et al., 2013). In policy, some objectives of degrowth aim to sustainably scale the use of resources, distribute income and wealth in a fair and just way, and efficiently allocate resources (Cosme et al., 2017) through tighter-knit communities and solidarity. Policy instruments that are in line with degrowth principles include non-monetary exchange systems, salary caps, new ownership patterns, reduction of working hours, and reduction of overall consumption (Cosme et al., 2017). The characteristics and concepts mentioned above will subsequently be referred to as degrowth principles. Degrowth policy has already been implemented and studied in various cultural contexts. Without going into details, examples from Denmark (Verco, 2019), Sweden (Peeters, 2023; Gkagkalidis, 2022), India (Pansera & Owen, 2018), and Cuba (Sekulova et al., 2013) have proven to enhance well-being in local communities and provide inspiration for further implementation of degrowth principles.

Thus, scholars argue that applying degrowth principles could lead to increased levels of happiness due to their consideration of the environment and human well-being. While degrowth provides a wide framework within which to tackle current-day issues, I will focus on the downplaying of economic growth and the strengthening of social ties for the purpose of this study.

As such, instead of striving to increase GDP and hope for a trickle-down effect on well-being, degrowth could provide a framework within which well-being and happiness can be decoupled from economic growth. Through redefining collective belief, the degrowth principles of deprioritising economic growth and strengthening social ties could increase their happiness, the latter could be

achieved without constant GDP growth at the expense of the environment. Regions 'left behind' might benefit from degrowth in order to step away from the race for growth and focus on qualitative changes in their societies and economies.

e. Limitations of degrowth

However, within the capitalistic mindset, degrowth sounds counterintuitive. While societies are used to striving for economic growth, this notion seems to halter development. Capitalism and economic growth have provided prosperity in recent history and drastically altering this paradigm might seem illogical. Many detractors mention how degrowth will lead to recession, unemployment, state oppression, or individual self-negation (Parrique, 2019) and represents a new version of austerity (Hickel, 2020). Indeed, these worries are valid and must be taken into consideration in the transition to degrowth. While many studies have explored and evaluated how the implementation of degrowth principles will affect humans and the planet, there is a need to concretise policy that will fruitfully transition from a capitalistic mindset to a degrowth mindset. More precisely, this paper will attempt to analyse how degrowth influences well-being and if the application of degrowth principles has an effect on happiness in regions of Europe.

f. Conceptual model
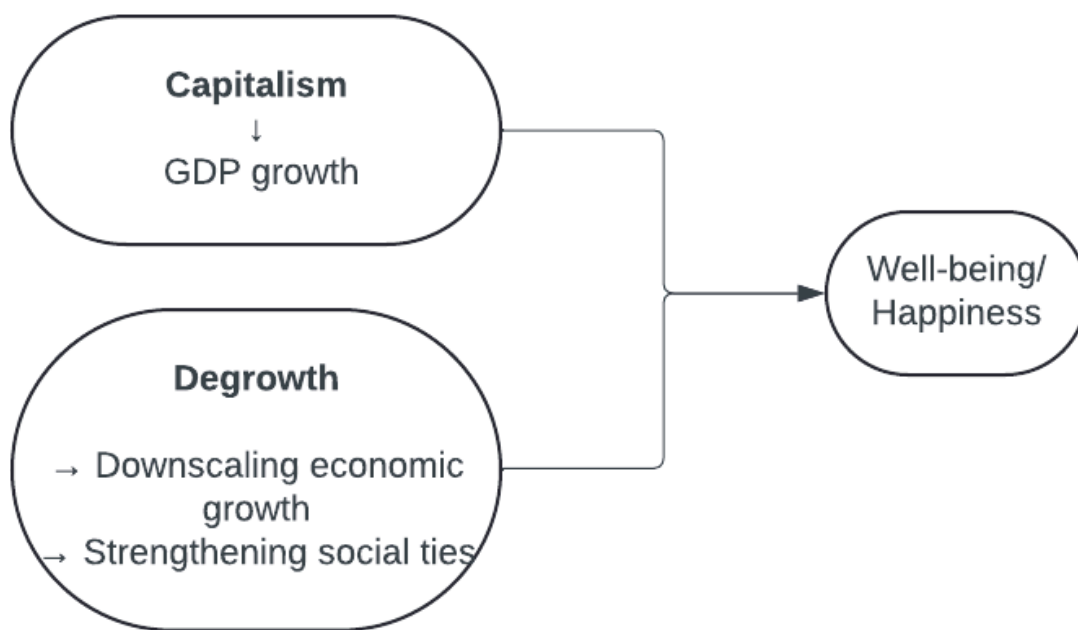
Figure 1: Conceptual model (Source: author)

The conceptual model for this study visualises to what extent capitalism or degrowth principles influence well-being. The degrowth principles considered for this research include not prioritising the maximisation of economic prosperity and strengthening social ties while GDP growth includes the measurement of capitalist expansion. Within the theoretical framework clarified above, these variables will be tested for correlation with happiness. This could eventually lead to sufficient evidence to determine whether degrowth principles affect well-being. The aim of this study is to evaluate a potential transition to degrowth by examining the correlation of its principles to well-being while correcting for each region's GDP growth rate.

3. Methodology

a. Methodological approach

For the purpose of this research, I conducted a quantitative statistical analysis to find out whether adherence to degrowth principles can influence well-being. I tested proxies to degrowth and happiness for signs of correlation. Measuring the latter quantitatively allowed me to find a correlation between the variables in a statistical analysis and reveal to what extent degrowth principles influence well-being. This methodology has been applied in various other research projects. Kallis et al. (2012) conducted a statistical analysis to find a correlation between market consumption and well-being. They have found statistically significant results, claiming that 'there is no universal causal link between human well-being and the consumption of goods and services' (Kallis et al., 2012, p. 5). Furthermore, Fritz and Koch (2016) argued how using quantitative statistical methods in researching the relation between degrowth and well-being reduces the complexity of datasets and enables the crystallisation of interconnections between variables. Thus, a statistical regression analysis reduced to being the most suitable methodology for the purpose of this study.

b. Data collection

The datasets for this research was sourced from the European Social Survey (ESS) and Eurostat. The ESS is an "academically driven cross-national survey" (About ESS n.d.) conducted across Europe to measure attitudes, beliefs, and behaviour patterns in more than thirty countries. Questionnaires are randomly sent out bi-annually at the individual level. They are held in multiple countries at different levels including national and regional levels. For the purpose of this research, I analysed the responses to the Cross-National Online Survey-2 (CRONOS2). This dataset provides data on degrowth proxies that are most suitable for this study. It is an online survey conducted cross-nationally in European countries and has been performed across six waves of which I will be using the fourth. The countries included in the fourth wave are Austria, Belgium, Czechia, Finland, France, Hungary, Iceland, Italy, Portugal, Slovenia, Sweden and the United Kingdom. The respondents were asked to answer country-specific questions. The survey was undertaken from 2021 to 2023. This temporal framework allowed for recent and up-to-date data to provide a better contextual understanding.

Additionally, I studied a dataset from Eurostat. The latter is the statistical office of the European Union aiming to provide high-quality statistics and data on Europe. Eurostat coordinates statistical activities at Union level and provides reliable data on EU Member states. They provide the needed information on GDP growth rate of every NUTS 2 region.

The cases studied for this study are limited to 6 countries partaking in the ESS CRONOS2 wave 4. As Eurostat covers EU member states only and the ESS the 12 countries mentioned above (of which only 6 are Member states), the intersection of the cases of both datasets will be considered. Thus, the cases studied for this research are the following: Austria, Belgium, France, Italy, Portugal and Sweden. As the unit of analysis for this research is regions, I used the same unit for the realisation of the statistical analysis, namely NUTS 2 regions. I analysed four variables and tested them for correlation in a multiple linear regression.

c. Dependent variable

The dependent variable concerns happiness. Here, happiness serves to indicate the well-being of the respondents in the concerned European regions. Happiness is equalled to well-being in order to operationalise the latter. The label of the used variable is: 'During the past week, how often were you happy?' which is an ordinal variable ranked from 1 to 4, 1 standing for 'Rarely or not at all' and 4 representing 'most or all the time'. By aggregating the data to the regional level, I computed the mean level of happiness per NUTS 2 region. As such, the closer to 4 the happier the people are in this region.

d. Independent variables

The independent variables of the deprioritisation of the maximisation of economic prosperity and of the strengthening social ties among people are used as proxies for degrowth principles.

The first one aims to reflect that economic growth is to be neutralised as it entails the idea of shifting the growth paradigm to degrowth. Not maximising economic prosperity aligns with degrowth in the sense that this principle does not place economic growth at the centre, discourages GDP growth and seeks to reduce the importance of economic growth as a fundamental part of the well-being of a region. For this variable, the respondents were asked to rank how much they prioritise the maximisation of economic prosperity on a scale from 1 to 5 in order to make the country an ideal society, 5 being a top priority and 1 being not a priority at all. I aggregated this individual data to the regional level by computing the mean. For the sake of this research, I reversed the original ranking in order to align with the other variables. The higher the ranking, the more they align with degrowth principles. As such, the closer the regions' responses are to 5, the less they prioritise the maximisation of economic prosperity.

The second independent variable indicates the importance of harmonic coexistence entailed in degrowth principles. It stands for the decouplement from the individualistic trait in capitalism as opposed to the communitarian aspects of degrowth. For the prioritisation of strengthening social ties among people, the respondents were asked to rank how they prioritise strengthening social ties among people in order to make their country an ideal society on a scale from 1 to 5, 1 being no priority at all and 5 being top priority. Again, I aggregated this individual level data to the regional level and computed the mean. The closer the case is to 5, the more they prioritise the strengthening of social ties among people.

The dataset for these two variables comes with all CRONOS2 variables. I isolated the variables in question (labelled as w4q10 and w4q15 respectively) for the purpose of this study. In exact terms, the variables are named: 'In order to make the [country] an ideal society, Maximising economic prosperity' and 'In order to make the [country] an ideal society: Strengthening social ties among people'. Thus, complying to degrowth principles would represent not prioritising the maximisation of economic prosperity as defined in the theoretical framework and prioritising the strengthening of social ties among people.

Finally, the GDP growth rate variable reflects the percentage of change in GDP compared to the previous year of each region. The Eurostat dataset provided the GDP at current market prices for each year. I computed the growth rate of the years 2021 and 2022. To obtain a single variable for which to test for correlation, I calculated the mean of the 2021 and 2022 GDP growth rate. That way, the responses to the other variables could be given in the temporal framework of the GDP growth rate of 2021 and 2022. The consequences of the latter could then be reflected in the answers given during the 2021 to 2023 CRONOS 2 survey and thus, the variables' temporal framework are aligned.

The independent variable of GDP growth will be used to examine whether well-being is correlated to economic growth. Thus, for this research, I assumed that they are not correlated and that well-being has a stronger correlation to degrowth principles than to GDP growth. For the statistical analysis, I sourced the GDP from NUTS 2 regions from Eurostat as an Excel sheet and uploaded it to SPSS.

The final result of this multiple linear regression was tested against the following null hypothesis: In Europe, there is no correlation between well-being on one hand and GDP growth, deprioritisation of maximising economic prosperity and prioritisation of strengthening social ties among people on the other hand.

e. Descriptive statistics

The regression analysis was run on 58 cases representing different NUTS 2 regions of Austria, Belgium, France, Italy, Portugal and Sweden. The mean GDP growth rate of all cases equals 8.5% (see Table 1). As the concerned regions are all located in developed countries in Europe, this number represents a rather high growth rate compared to the average (the general GDP growth rate in developed countries varies between 1% and 3% according to a study by Kitov (2006)). Moreover, data

on previous GDP growth rates are considerably lower than the mean obtained for this analysis (see Raw Data).

Another observation shows that none of the 58 cases have a negative GDP growth rate for the years 2021 and 2022 (see Appendix) meaning that the GDP increased in all the regions over these years. Upon comparing with the complete dataset of all NUTS 2 regions of Europe, most regions in fact had a positive GDP growth rate for these two years. Thus, the later interpretations are set in the context of developed Western countries whose GDP is rising at a high rate.

However, it must be considered that the GDP growth rate of these regions represent the mean growth rate of 2021 and 2022. Thus, they may reflect the effects of the COVID19 pandemic. In fact, as Bailey et al. (2020)'s study has shown, many regions experienced a dip in their GDP in 2020, suggesting that this high growth rate could result from the rebounce after the pandemic.

Additionally, as the GDP for none of the regions is negative, there is no economic decline and thus, the regions are not considered 'left behind' according to the study by Rodriguez-Pose (2019). The following analysis is thus run on economically well-off places according to GDP-measured standards and in the temporal framework after the COVID19 pandemic.

Variables	Mean	Number of cases
'How much of the past week were you happy?'	2.6555	58
'In order to make the [country] an ideal society, Maximising economic prosperity'	2.1638	58
'In order to make the [country] an ideal society: Strengthening social ties among people'.	3.9310	58
Average GDP growth rate for 2021 and 2022	8.4661	58

Table 1: Descriptive statistics

4. Results

The ANOVA test (see Table 2) shows a p-value of 0.044 which is judged significant at a 95% confidence level. The entire regression is thus statistically significant and the null hypothesis is rejected, meaning that at least one independent variable is correlated to happiness and can significantly predict happiness levels.

	Sum of Squares	Significance
Regression	0.340	0.44
Residual	2.123	

Table 2: ANOVA test

a. Deprioritising the maximisation of economic prosperity

The deprioritisation of maximising economic prosperity emerges as the most significant predictor of happiness. The regression coefficient indicates a marginally significant positive association with happiness ($p = 0.054$). Although not prioritising maximum economic prosperity is not statistically significant at a 95% confidence level, it remains the most significant predictor. In other words, there is a slight linear relationship between not prioritising maximum economic prosperity and happiness. The standardised coefficient is positive (0.264) meaning that an increase in the deprioritising of economic prosperity represents an increase in happiness levels (see Table 3). This marginally significant relationship indicates that while the effect is not strong, it is noticeable.

A region that does not see maximising economic growth as a priority (and thus maximising GDP growth) will experience increased happiness. If maximising economic prosperity is inherent to capitalism and GDP growth, the pursuit of the latter turns out to be detrimental to happiness aligning with studies by McInerney et al. (2023), Hickel (2020) and Koch (2018) to name but a few.

Considering the context of Western Europe, developed regions might have reached the cap in line with the Easterlin paradox after which GDP growth becomes futile for well-being levels. Seeing as the regions of this dataset have relatively high GDP growth rates, a further increase in the latter does not relate to increased happiness any longer.

This finding supports the argument for development models that prioritise well-being and environmental health over economic expansion for its own sake. Seen as not maximising economic prosperity was defined as a proxy of degrowth and is marginally significant in predicting happiness levels, one could suggest that adhering to degrowth principles could increase well-being. Taking these observations one step further, one could suggest that regions left behind that fuel the desire to maximise economic growth experience decreasing happiness due to that desire and not necessarily because of declining GDP growth rates per se. The GDP growth rate might not be responsible for decreasing happiness, but rather the unfulfilled urge to maximise economic prosperity as a goal in and of itself. Instead of focusing on maximising the economy solely for growth's sake, regions could adopt policies that fuel well-being and leave the economy to grow as a result of increased well-being. This is further supported by Butler's (2018) study on how the striving for more under the name of capitalism is detrimental to individual happiness. At an aggregated regional level, this obstacle to happiness might be lessened if maximising economic growth becomes more irrelevant at a regional level. The regions left behind that are experiencing low levels of happiness could divest their focus of maximisation of economic growth as an antidote for decreasing happiness.

	Standardised coefficient (Beta)	Significance
(Constant)	3.058	< 0.001
'In order to make the [country] an ideal society, Maximising economic prosperity'	0.264	0.054
'In order to make the [country] an ideal society: Strengthening social ties among people'.	-0.169	0.215
Average GDP growth rate for 2021 and 2022	0.078	0.539

Table 3: Coefficient table

b. GDP growth rate

The GDP growth rate variable is not statistically significant (p = 0.539), indicating no significant relationship with happiness levels (see Table 3). However, while not statistically significant, the standardised coefficient is positive (0.078) meaning that an increase in the GDP growth rate represents an increase in happiness levels. This seems contradicting: on one hand, a region with high GDP will have high levels of happiness, but on the other hand, a region that does not seek to maximise economic prosperity will also experience high levels of happiness. In order to clarify this contradiction, I looked at the correlation between these two independent variables. The correlation between deprioritising maximum economic growth and GDP growth rate is not significant at a 95% level of significance (p=0.364). Furthermore, the weak Pearson correlation coefficient of 0.047 also indicates that there is close to no linear relationship between the two variables (see Table 4). Seeing as the coefficient is positive nonetheless, not maximising economic growth tends to be related to increased GDP growth rates and vice versa. This seems surprising as increasing economic growth seems to become less of a priority the higher the GDP. However, these assumptions are based on statistically insignificant results and are not explanatory enough to draw conclusions. Additionally, the results are analysed in the post-pandemic context where GDP growth rates were exceptionally high. This temporal framework could have skewed the results as it did not allow for the standard GDP growth rate of these regions. Moreover, GDP growth rates are more susceptible to change than respondents' perceptions and the latter might not have altered with the effects of the pandemic.
Nevertheless, in line with the literature, GDP growth rate is not significantly related to happiness. If degrowth principles are applied in regions with declining GDP, it might further support the argument that happiness is not captured by the GDP measure. The latter being inherent to capitalism, this analysis might suggest that the growth paradigm could be an obstacle to happiness. Moving beyond economic growth might thus be related to increased happiness.

c. Strengthening social ties among people

Perceptions of strengthening social ties among people did not significantly predict happiness (p = 0.215) at a 95% confidence level (see Table 3). The standardised coefficients of -0.169 suggest that an increase in the variable is associated with a decrease in happiness levels. This seems contradictory to previous studies that have proven how community and social ties increase well-being (McInerney et al., 2023). Respondents appear to perceive strengthening social ties as less of a priority when they experience higher levels of happiness. As such, on a community level, this proxy for degrowth does not impact happiness as expected.

		How much of the past week were you happy?	'In order to make the [country] an ideal society: Strengthening social ties among people'.	'In order to make the [country] an ideal society, Maximising economic prosperity'	Average GDP growth rate for 2021 and 2022
Pearson Correlation	How much of the past week	1	-0.263	0.324	0.105

		were you happy?			
	'In order to make the [country] an ideal society: Strengthening social ties among people'.	-0.263	1	-0.333	-0.084
	'In order to make the [country] an ideal society, Maximising economic prosperity'	0.324	-0.333	1	0.047
	Average GDP growth rate for 2021 and 2022	0.105	-0.084	0.047	1
Significance	How much of the past week were you happy?	.	0.023	0.007	0.217
	'In order to make the [country] an ideal society: Strengthening social ties among people'.	0.023	.	0.005	0.264
	'In order to make the [country] an ideal society, Maximising economic prosperity'	0.007	0.005	.	0.364
	Average GDP growth rate for 2021 and 2022	0.217	0.264	0.364	.

Table 4: Correlations table

d. Limitations of the model

It has to be noted that this model has weak explanatory power over happiness levels. The regression sum of squares (0.340) is considerably lower than the residual sum of squares (2.123), suggesting that this model does not account for variables that would noticeably vary the happiness levels (see Table 1). Besides, Table 5 shows that the value of the R-squared is quite low (0.138) meaning that the independent variables are not strong predictors of happiness levels. This is further supported by the low adjusted R-square value (0.090). The results of the latter imply that GDP growth rate, not maximising economic growth and strengthening social ties are poor predictors of happiness levels in regions of Europe.

When further analysing the coefficients table (see Table 3), the constant, which is significant ($p = 0.001$), is rather high (3.058) meaning that even if all independent variables are zero, there is a baseline level of happiness. Again, this suggests that the variables are not strong predictors of the latter.

	R-square	Adjusted R square
Model 1	0.138	0.090

Table 5: Model summary

e. Reflection on results

Finally, it is important to mention that the proxies for degrowth represent respondents' opinion on whether these principles could make their respective countries an ideal society. Aggregated to the region level, the responses do not represent regional policy or political agendas, but rather individual perceptions on these principles. The results might thus not be explanatory enough to conclude whether degrowth principles in policy have an actual impact on well-being in these regions. Likewise, the independent variables have little explanatory power over happiness calling for other variables to be accounted for.

What can be derived from this analysis is that happiness is related to the degrowth principle of not maximising economic growth. This invites further research into what policies can be created based on this perception in order to descale the economy to meet planetary boundaries, all while raising happiness and well-being.

5. Conclusion

This research aimed to find out to what extent degrowth principles could influence the well-being of regions in Europe. In light of the ecological crisis and inequalities, constant GDP growth and economic expansion as an inherent trait of capitalism are increasingly being questioned and criticised. The latter are also fuelling decreasing well-being and happiness. Thus, degrowth as an economic, political and social movement emerged as an antidote for these issues.

The present study has shown how happiness is related to the belief that maximising economic prosperity does not contribute to creating an ideal society. Regions that tend to deprioritise economic growth are more likely to experience higher levels of happiness, suggesting that this degrowth principle could increase well-being. Regions experiencing decreased levels of well-being could benefit from a mindset change away from maximising economic prosperity. Shifting away from this focus can give space to more well-being. This would align with degrowth principles and fuel the argument for the latter to increase well-being. If economically weakened regions stopped striving for

growth, they could increase happiness and escape the growth paradigm of which they have fallen victims of. The strive for GDP growth could be responsible for declining well-being, not due to economic decline, but due to the desire to constantly maximise economic expansion. In light of the psychological effect of the latter, degrowth could serve as a remedy for decreasing happiness.

However, due to the weak explanatory power of the variables, there is a need for further and deeper research into what factors influence well-being. As degrowth as such cannot be measured and quantified, it would be useful to analyse policies in regions experiencing high levels of happiness and compare them to degrowth principles. That way, a direct link between degrowth and happiness could be made with explicit examples of succeeding policy.

The case for degrowth could also be strengthened through its downplaying of GDP as a measure for happiness. Seeing as GDP is not statistically correlated with happiness, it does not serve as a valid tool to measure it. If governments and politicians keep pursuing GDP growth as a goal in and of itself, they might miss the point of what is really desired: happiness and well-being. Instead of spending resources, money and time into capitalistic endeavours, damaging the environment and well-being, authorities could shift the latter to degrowth policies. This could provide a healthy and happy planet and society.

This study has offered an insight into a viable alternative to the GDP growth paradigm. While the statistical model might not meet the strength of the literary arguments for degrowth, it has however supported the latter by proving that GDP is not an adequate measurement for happiness. Further research is needed to create strong arguments to support the transition to degrowth.

6. **Appendix**

Research ethics and data management risks

The research ethics concerning the used datasets are set out by the ESS and Eurostat respectively. As both abide by EU law as part of the Union's establishments, the two institutions work conforming to the General Data Protection Regulation (GDPR). The GDPR aims to protect the fundamental rights and freedom of natural persons when it comes to processing their personal data. The data will be used for research purposes only and the respondents remain anonymous.

The datasets were downloaded to my personal computer and stored in Excel and SPSS. Data management complies with the GDPR. There are no risks involved in data management as the datasets have been created conforming to the ethics of the GDPR.

Descriptive Statistics

	Mean	Std. Deviation	N
How much of the past week were you happy?	2.6555	.20787	58
In order to make the [country] an ideal society: Strengthening social ties among people	3.9310	.15781	58
In order to make the [country] an ideal society: Maximising economic prosperity (reversed)	2.1638	.28673	58
averagegdpgrowthrate20212022	8.4661	2.42282	58

Table 6: Descriptive statistics

Correlations

		How much of the past week were you happy?	In order to make the [country] an ideal society: Strengthening social ties among people	In order to make the [country] an ideal society: Maximising economic prosperity (reversed)	averagegdpgrowthrate202120 22
Pearson Correlation	How much of the past week were you happy?	1.000	-.263	.324	.105
	In order to make the [country] an ideal society: Strengthening social ties among people	-.263	1.000	-.333	-.084
	In order to make the [country] an ideal society: Maximising economic prosperity (reversed)	.324	-.333	1.000	.047
	averagegdpgrowthrate202 12022	.105	-.084	.047	1.000
Sig. (1-tailed)	How much of the past week were you happy?	.	.023	.007	.217
	In order to make the [country] an ideal society: Strengthening social ties among people	.023	.	.005	.264
	In order to make the [country] an ideal society: Maximising economic prosperity (reversed)	.007	.005	.	.364
	averagegdpgrowthrate202 12022	.217	.264	.364	.
N	How much of the past week were you happy?	58	58	58	58
	In order to make the [country] an ideal society: Strengthening social ties among people	58	58	58	58
	In order to make the [country] an ideal society: Maximising economic prosperity (reversed)	58	58	58	58
	averagegdpgrowthrate202 12022	58	58	58	58

Table 7: Correlations table

Variables Entered/Removed[a]

Model	Variables Entered	Variables Removed	Method
1	averagegdpgrowthrate202120 22, In order to make the [country] an ideal society: Maximising economic prosperity (reversed), In order to make the [country] an ideal society: Strengthening social ties among people [b]	.	Enter

a. Dependent Variable: How much of the past week were you happy?

b. All requested variables entered.

Table 8: Variables Entered/ Removed

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.372[a]	.138	.090	.19827

a. Predictors: (Constant), averagegdpgrowthrate20212022, In order to make the [country] an ideal society: Maximising economic prosperity (reversed), In order to make the [country] an ideal society: Strengthening social ties among people

Table 9: Model summary

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.340	3	.113	2.884	.044[b]
	Residual	2.123	54	.039		
	Total	2.463	57			

a. Dependent Variable: How much of the past week were you happy?

b. Predictors: (Constant), averagegdpgrowthrate20212022, In order to make the [country] an ideal society: Maximising economic prosperity (reversed), In order to make the [country] an ideal society: Strengthening social ties among people

Table 10: ANOVA test

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	3.058	.802		3.814	<.001
	In order to make the [country] an ideal society: Strengthening social ties among people	-.222	.177	-.169	-1.255	.215
	In order to make the [country] an ideal society: Maximising economic prosperity (reversed)	.191	.097	.264	1.969	.054
	averagegdpgrowthrate202 12022	.007	.011	.078	.618	.539

a. Dependent Variable: How much of the past week were you happy?

Table 11: Coefficients table

name	cntry	region	socialties_mean	happiness_mean	reverse_ranking_econprc	averageqdpqrowthrate20212022
CRON2WSc01	FR	FRI2	3.83	2.00	1.83	4.12
CRON2WSc01	FR	FRB0	4.08	2.80	2.03	4.70
CRON2WSc01	FR	FRK1	4.00	2.60	2.00	5.62
CRON2WSc01	FR	FR10	3.97	2.76	2.13	5.69
CRON2WSc01	FR	FRF1	4.00	2.88	2.18	5.79
CRON2WSc01	FR	FRD1	3.75	2.67	2.38	5.95
CRON2WSc01	FR	FRK2	4.01	2.70	2.25	5.98
CRON2WSc01	FR	FRF3	3.68	2.69	2.00	6.04
CRON2WSc01	FR	FRE1	4.00	2.54	1.88	6.06
CRON2WSc01	FR	FRC2	3.78	2.67	1.78	6.26
CRON2WSc01	FR	FRJ2	3.36	2.74	2.13	6.30
CRON2WSc01	SE	SE11	3.90	2.73	2.44	6.54
CRON2WSc01	FR	FRI3	4.13	2.63	2.17	6.56
CRON2WSc01	FR	FRC1	4.00	2.83	2.00	6.67
CRON2WSc01	SE	SE22	3.85	2.78	2.42	6.88
CRON2WSc01	FR	FRE2	3.36	2.71	2.28	6.90
CRON2WSc01	FR	FRG0	3.87	2.65	2.11	7.00
CRON2WSc01	FR	FRI1	3.93	2.72	2.00	7.02
CRON2WSc01	FR	FRJ1	3.91	2.79	2.00	7.07
CRON2W4c01	BE	BE10	3.86	2.75	2.25	7.41
CRON2W4c01	AT	AT13	3.85	2.77	2.57	7.46
CRON2W4c01	BE	BE31	3.64	2.17	2.09	7.47
CRON2WSc01	FR	FRH0	3.87	2.76	2.40	7.50
CRON2WSc01	IT	ITG	4.12	2.43	1.65	7.64
CRON2WSc01	IT	ITI	4.16	2.21	2.12	7.72
CRON2W4c01	AT	AT32	3.78	2.79	2.56	8.04
CRON2W4c01	AT	AT31	3.80	3.00	2.48	8.08
CRON2W4c01	PT	PT16	4.18	2.84	1.56	8.11
CRON2W4c01	AT	AT11	4.17	2.33	2.83	8.11
CRON2W4c01	AT	AT33	4.04	2.68	2.47	8.15
CRON2WSc01	IT	ITF	4.14	2.43	1.82	8.28
CRON2WSc01	IT	ITC	4.01	2.34	1.99	8.39
CRON2WSc01	IT	ITH	4.06	2.23	2.13	8.49
CRON2WSc01	FR	FRD2	4.09	2.53	2.13	8.70
CRON2W4c01	BE	BE35	3.75	2.70	2.10	8.71
CRON2WSc01	BE	BE32	4.10	2.65	2.06	8.84
CRON2WSc01	PT	PT11	4.25	2.61	1.69	8.93
CRON2W4c01	AT	AT21	3.66	3.05	2.38	9.00
CRON2WSc01	BE	BE34	4.09	2.25	2.18	9.00
CRON2WSc01	SE	SE12	3.80	2.83	2.53	9.02
CRON2W4c01	BE	BE25	3.77	2.72	2.13	9.09
CRON2WSc01	SE	SE21	3.88	2.81	2.65	9.11
CRON2WSc01	SE	SE23	3.90	2.79	2.53	9.12
CRON2WSc01	SE	SE31	3.87	2.72	2.44	9.23
CRON2W4c01	BE	BE21	3.65	2.73	2.15	9.38
CRON2W4c01	AT	AT12	3.79	2.78	2.50	9.75
CRON2WSc01	FR	FRF2	4.05	2.40	1.95	9.84
CRON2W4c01	BE	BE22	3.71	2.65	2.14	9.97
CRON2W4c01	BE	BE33	4.18	2.83	1.95	10.15
CRON2WSc01	PT	PT18	4.04	2.78	1.85	10.22
CRON2WSc01	PT	PT17	4.08	2.58	1.68	10.49
CRON2WSc01	BE	BE23	3.78	2.76	2.11	11.22
CRON2WSc01	SE	SE32	4.03	2.63	2.42	11.86
CRON2WSc01	FR	FRL0	3.94	2.67	2.09	12.90
CRON2W4c01	AT	AT34	3.74	2.81	2.65	13.50
CRON2WSc01	SE	SE33	4.03	2.93	2.46	13.96
CRON2W4c01	BE	BE24	3.63	2.73	2.26	14.21
CRON2WSc01	PT	PT15	3.93	2.47	1.57	16.84

Table 12: Entire dataset with the 4 variables and NUTS2 codes

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