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Beyond the Fetish of Economic Growth: Measuring Sustainable Economic Welfare in Chile

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Measuring Sustainable Economic Welfare in Chile

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Abstract

This article presents a calculation of the Index of Sustainable Economic Welfare (ISEW) for the Chilean case (2000-2018). Because of their solid theoretical foundations, we argue that the ISEW is a much more correct and accurate measure of development than Gross Domestic Product (GDP). In the Chilean case, the key explanatory variable in well-being is the economic rent associated with the depletion of its non-renewable natural resources, but we also highlight the need to make visible the Unpaid Domestic and Care Work (UDCW), which represents the biggest sector of the Chilean economy, when its properly measure.

We emphasize the need for a more comprehensive and broader view of the development process and its meaning, according to the guidelines that the ISEW can deliver and its foundations. We finally pointed out to the need to systematize and institutionalize the construction of this indicator in order to make it understandable and legitimate for citizens. In this way, the ISEW can serve as input for the discussion about the direction of our development process.

Keywords: Sustainable development, Max-Neef "Threshold Hypothesis", Index of Sustainable Economic Welfare, Economic rents, Chile.

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1. Introduction: The need for better and comprehensive development indicators

What if we defined the progress of our societies not by the monetary value of the goods and services we consume, but by the quality of life we create in our social and ecological environment? What if we gained a better perspective on economic progress and were able to distinguish between *genuine progress* in a society and mere economic growth? What if we accounted for the "invisible costs" of economic growth? What if we measured our economic well-being from the point of view of long-term ecological sustainability and recognized that the sale of our natural resources also implies a loss of income that is not accounted for in GDP?

Economists often use GDP and per capita GDP as a measure of well-being and progress. It is assumed that countries with high per capita GDP exhibit higher levels of well-being, even though GDP does not distinguish whether this growth is caused by investment in new schools or hospitals or by increased spending on drugs to treat anxiety and depression, weapons or cleaning up toxic waste from pulp production or mining operations.

Our society lives alienated in GDP fetishism. A fetish is a figure or image representing a supernatural entity that is worshipped, and is attributed the power to govern things or people. The origin of the word goes back to the Latin word "*ficticius*" which means artificial or fictitious. Another version indicates that the word comes from the portuguese word "*feitiço*" which means spell. Both versions describe in an accurate manner the current situation. GDP has become an artificial abstraction to which we worship and to which we subordinate our policies, actions and behaviors, keeps us spellbound with its promise of well-being and progress. The economics profession has surrendered itself over to the fetishism of GDP as the indicator for measuring a country's progress and degree of development. This choice is not an innocent one and has consequences, because it defines and shapes the economic policy set of possibilities and the design of public policies.

But development must be understood from a broad perspective that includes the interrelationships between four fundamental dimensions: (i) economic growth, (ii) human well-being, (iii) reduction of inequalities and (iv) ecological sustainability. GDP deals only with the first dimension and therefore, by equating development with economic growth, the signal is clear: "The higher the GDP (per capita), the higher the development".

This narrow view neglects the other three fundamental dimensions of development and therefore is also unable to analyze the relationships between these dimensions, e.g., between economic growth and well-being or economic growth and ecological sustainability. Let alone the more complex relational triad of "economic growth - inequality - ecological sustainability".

Measuring development properly therefore, implies having an indicator that, as a basic condition, considers the dimensions mentioned above. This is precisely the purpose of indices such as the "Index of Sustainable Economic Welfare" (ISEW) and the "Genuine Progress Indicator" (GPI).

1.1 Beyond GDP

Gross Domestic Product (GDP) measures the monetary value of the production of final goods and services in an economy. It is a measure of the value of a country's aggregate output. And when divided by the number of inhabitants, gives the GDP per capita. Economists, and most of the population, have assumed that GDP is the best indicator to measure the development, progress, and welfare of a country. However, as early as the 1930s, Simon Kuznets, creator of the System of National Accounts that gave birth to GDP, highlighted the impossibility of inferring the welfare of a nation through an indicator such as GDP. If there were growth targets, Kuznets pointed out, "they should specify more growth of what and for what", arguing that economic growth must be able to produce more "goods" than “evils” or "ills" to be able to contribute to a nation's well-being. In addition to this prescient warning, there are numerous and growing criticisms of GDP. However, these well-founded criticisms have failed to be taken into consideration, within the realm of policy design and development strategies.

The first problem with GDP is that it assumes that value is found only in activities to which it is possible to assign a price, i.e., it leaves out all activities that occur outside the market or that are not assigned a price through this mechanism. But there are activities highly valuable to society that are not remunerated and therefore are not counted in GDP. The most obvious example is the work performed by people in the household, particularly women. This domestic work - as well as care and voluntary activities - are not included in GDP as they do not have a "market valuation".

Nor does GDP consider the distribution of the value produced. This implies that in its per capita version, GDP cannot and should not be considered as a good indicator of development. Since it does not consider the distribution of income in a country. As an example, let us consider two countries with the same level of GDP per capita, but in country A, 10% of the total income flow goes to the richest 1% while in country B, 30% of the total income flow goes to the richest 1%. Which of the two countries is closer to Development? The question would still be relevant even if country A had a lower GDP per capita than B or if we do the exercise for the same country at two different points in time. In addition, inequality may induce higher unproductive expenditures such as security, weapons, guards, alarms, and so on.

In another dimension of relevant criticism, it is argued that GDP does not even consider its financial sustainability. As Martínez-Alier y Roca (2013) points out: "An economy can have high GDP growth but be indebted to the outside world in an unsustainable way or be growing thanks to a fictitious increase in the prices of financial or real estate assets. Thus, it is unable to tell us whether or not growth is sustainable even in the short term and from a strictly economic point of view".

Furthermore, GDP incorrectly measures income and wealth in natural resource-abundant countries such as Chile, as it does not quantify natural capital losses and natural resource depletion. On the contrary, GDP erroneously considers natural wealth losses such as a lower stock of mineral resources as net income. We will see that for the Chilean case, this is a key element.

Finally, a critique from the ecological sciences refers to the environmental impacts of economic growth through the concept of "defensive expenditures" or "compensatory expenditures". These expenditures are those that should be made to protect or "compensate" citizens for the harms attributable to economic growth and include expenditures that must be incurred to protect and maintain a sustainable level of our natural environment.

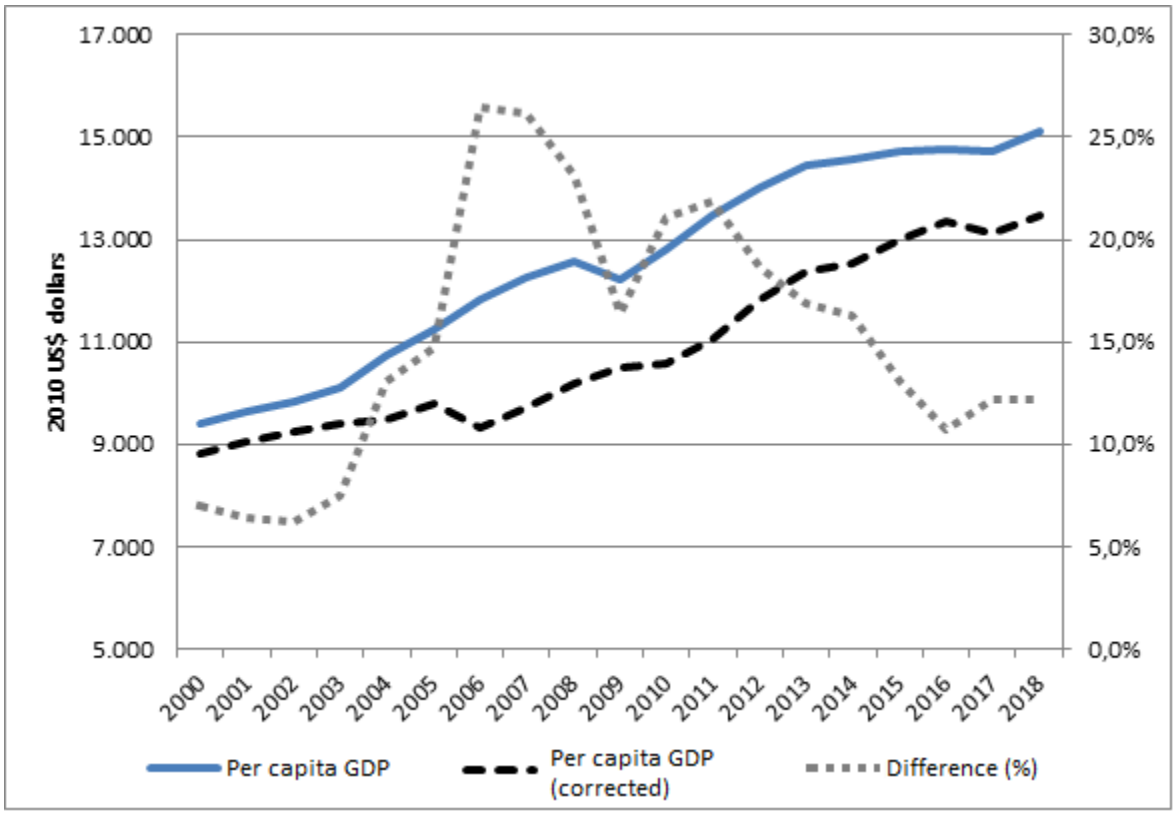
1.2 A first correction: the loss of natural capital

At the most basic level, that is, from the perspective of a proper measurement of income, the first correction to be made to GDP is to subtract the loss caused by the excessive depletion of our non-renewable natural resources. This loss of “natural stock” can be converted into a loss of income and corresponds to what in economics is called *economic rent*. An optimal exploitation of the resource would not generate a loss of income, but over-exploitation of the natural resource decreases the value of the total generated. In an optimization problem this extraction path does not maximize the total value that could be generated by the non-renewable resource. In colloquial terms this means "feast today, famine tomorrow".

The idea is that the sale of an asset (an amount of natural capital for instance) should not be considered as income if such sale reduces the ability to generate income in the future. Doing so leads to erroneous conclusions regarding the true income, as the source of income itself decreases with extraction. Therefore, a first correction to GDP is to consider the loss of the annual income flow caused by the depletion of non-renewable natural resources. In the Chilean case, the largest component that is subtracted to obtain the ISEW is the mining rent, i.e., the loss of income caused by the irrecoverable loss of natural capital.

This is highly relevant for countries like Chile, which is highly dependent on non-renewable natural resources. As Figure 1 shows, the correction is considerable, with differences reaching 25%in some periods. With this correction, Chile is no longer the country with the highest GDP per capita in the Latin America, falling to third place behind Argentina and Uruguay.

Figure 1: GDP per capita corrected for loss of income due to depletion of non-renewable natural resource



2. The Index of Sustainable Economic Welfare (ISEW)

Given the shortcomings mentioned above, it should be obvious that an increase in GDP does not necessarily translate into higher welfare, and that more comprehensive indicators are needed to measure countries' welfare.

The best-known version of ISEW was originally developed by economist Hermann Daly and theologian John B. Cobb (Daly and Cobb, 1989) for the United States with a dual purpose: on the one hand, the need to re-evaluate GDP as an indicator of progress, and on the other, to recognize that economic policies and the structural shape of economic development often worsen our ecological niche. For the Chilean case, there is one of the first works for developing countries in the article of Castañeda (1999). Recently, it has also been proposed its use at the local level as tool for the evaluation and guidance of regional public policies (see Bleys, 2013; Posner and Costanza, 2011; Pulselli et al., 2006).

When analyzing the evolution of ISEW and GDP for several developed countries, a revealing trend emerges : until the 1970s and 1980s, both indicators moved in tandem, while subsequently they followed divergent paths. While GDP exhibited a sustained growth path, ISEW stagnated and in many cases actually decreased. This led the Chilean economist Manfred Max-Neef to coin the so-called "Threshold Hypothesis" according to which "for every society there seems to be a period for which economic growth (as conventionally measured) leads to an improvement in the quality of life, but only up to a certain point - the threshold point - beyond which, if there is further economic growth, the quality of life may begin to deteriorate" (Max-Neef, 1995). Therefore, the concept of "uneconomic growth" has been used to refer to this situation and to argue that there is an "optimal scale" of economic activity in contrast to the dominant paradigm of "more is better".

It appears that this relationship is also observed at the level of individuals. Several studies from global life satisfaction surveys show that beyond a certain threshold, additional income does not contribute to greater happiness or well-being (Jebb et al., 2018, Ferrer-i-Carbonell, 2005; Boyce et al., 2010). Additional income has diminishing marginal returns to well-being: more income does not contribute to diminish "negative emotional states" and is in fact associated with higher levels of stress. This line of research shows us that the relationship between economic growth and well-being/quality of life is not as direct as often assumed.

The central idea of ISEW is to incorporate economic, environmental and social dimensions into a coherent theoretical framework in order to build a better measure of progress and well-being. Thus, ISEW includes adjustments for income distribution, natural resource depletion and loss, environmental damage, and the value of domestic labour among other corrections.

In general terms, the methodology for calculating the ISEW uses personal consumption as a starting point, and then a series of adjustments are made to reflect the aspects previously discussed. These adjustments fall into four broad categories.

First, it accounts for what are called "defensive expenditures", which are those expenditures necessary to "defend" ourselves against the unwanted by-products of economic production. Secondly, it considers the costs (or loss of future income) caused by the environmental deterioration. Thirdly, an effort is made to consider all types of work that contribute to human welfare but, since they are not traded on the market, do not have a price, and are therefore not counted in GDP. This includes voluntary activities and all unpaid domestic and care work (UDCW).

Finally, the economic value of the loss of natural capital is taken into account. This considers the depletion of non-renewable natural resources, the degradation of renewable resources and the loss of natural habitats. This is of major significance because the environment or natural capital has several functions (López, 1994, López, 2010, López and Schiff, 2013). The first function is purely productive, either through direct exploitation – as in the case of mining and forestry sectors - or as an input or production factor, as is the case with water in the aquaculture sector. The second function is that it operates as a waste receptacle. In other words, it can "absorb" the pernicious effects of productive processes. Finally, natural capital is a provider of

"amenities" delivering subjective well-being or utility. Hence the importance of measuring it explicitly and adequately. If losses of natural capital are not valued, and worse, if the depredation of natural resources is qualified as "economic progress" through aggregate indicators such as GDP, the wrong signals, and incentives for a sustainable economic use of natural resources are given.

In short, the ISEW can be roughly expressed as follows:

$$
\begin{aligned}
ISEW = \\
& personal\ consumption\ (adjusted\ by\ inequality) \\
& + \ nondefensive\ public\ expenditure\ (health, education, ss.of\ public\ infrastructure) \\
& + \ value\ of\ unpaid\ domestic\ and\ care\ work \\
& + \ flow\ of\ services\ associated\ with\ the\ consumption\ of\ durable\ goods \\
& - defensive\ private\ expenditures \\
& + training\ of\ capital \\
& - costs\ of\ environmental\ degradation \\
& - depletion\ of\ natural\ capital
\end{aligned}
$$

Such an indicator, which includes both the benefits and the costs of the economic process, provides valuable information to assess whether the benefits of growth exceed the additional costs of producing these material improvements.

One of the strengths of ISEW is that it allows a systemic view when analyzing well-being, as it recognizes the economic system as part of a larger interrelated system that incorporates the sociosphere and ecosphere. ISEW, unlike GDP, allows for the identification of "sustainability pathways", providing relevant insights for the fulfillment of goals associated with sustainable development.

Finally, another positive aspect of ISEW is that it provides a solid foundation for alternative prescriptions for development policies and strategies. By defining development in broader terms than just economic income, the set of policy alternatives and possibilities will have to change in the light of new information and new objectives. It is to be expected that sooner rather than later, economic policy prescriptions will be guided by indicators such as the ISEW and its sub-indicators.

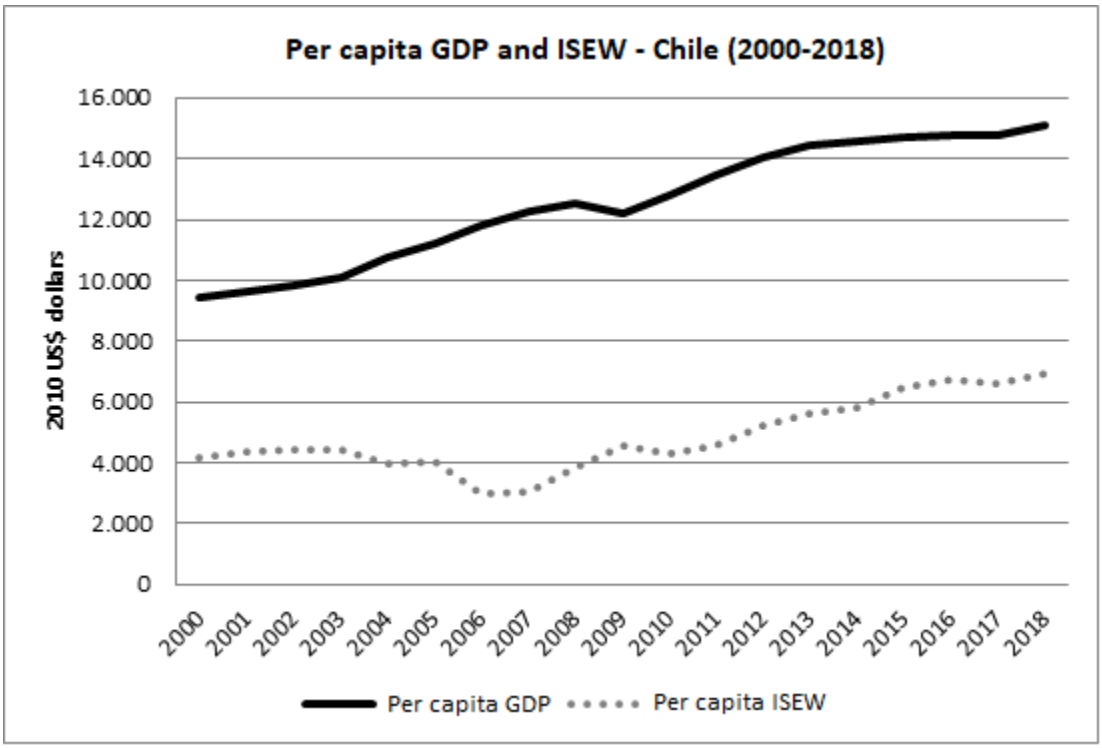
3. Results for the Chilean case

The results for the Chilean case are presented below. In Chile, the main component contributing to ISEW is the UDCW (28% of GDP), while losses due to the depletion of non-renewable natural resources are the main component that is subtracted. The value of this loss was13% of GDP on average, reaching 20-21% of GDP for some years (2006-2007).

3.1 Evolution of ISEW and GDP

Figure 2 shows the evolution over time of GDP per capita and ISEW per capita. The most striking feature of the relationship between these two indicators is that there are periods in which ISEW per capita falls (2005-2007) while GDP per capita shows a growth path for the same period. Something similar occurs for the period 2009-2010. Conversely, for the period 2008-2009 GDP per capita falls but ISEW per capita increases. This relationship is largely explained by the income losses due to the depletion of non-renewable natural resources.

Figure 2: GDP per capita and ISEW per capita for Chile, 2000-2018



3.2 An undervalued source of welfare: The UDCW

In Chile, in 2019, women spend 5.9 hours a week on unpaid care and domestic work, while men contribute only 2.7 hours. Thus, women work more hours than men during the week (11.5 v/s 9.8) but more than half of this work is unpaid. It is thus rendered invisible the value of a key task for creating wealth in the economy. And with it the work of millions of people, the vast majority women.

Since 1970s, this has been one of the main criticisms of feminist economics to the System of National Accounts. If considered as an "economic sector", the UDCW would become the most relevant sector of the chilean economy, doubling the financial and business services sector.

Despite this, the (GDP) does not consider the production of these unpaid household services. As has been pointed out, GDP is an indicator built exclusively through the valuation of activities with an exchange value and traded on the market.

A proper valuation of UDCW implies recognizing the contribution of this type of work to the well-being of society and its importance for the functioning of the economic system. Without this type of work, it is simply not possible to reproduce the economic and social system. Therefore, an indicator that aims to measure progress in a better way than GDP must necessarily make this work visible, even if it is not traded on the market with an explicit price.

All of this has been reflected in a recent study by Comunidad Mujer (2019) which states that" *those who do this work, mostly women, have been subsidizing the development of countries for centuries. The work they do has a price, but only if it is carried out by people outside the household. There is no awareness - or if there is, it is ignored for the convenience of some and to the detriment of others - that without domestic and care work there is no possibility of reproducing the economic and social system. It is unrealistic assumption to operate as if workers spontaneously appeared in their workplaces, without domestic and care work to renew their energies to function in that space. […] It is therefore essential to broaden the view and question the paradigms that have been installed, to adopt others that are based on the valuing of unpaid domestic and care work and co-responsibility for these tasks."*

In the Chilean case, the contribution of the UDCW to the ISEW is enormous, amounting to 28%of GDP. It is so important that if the UDCW had not been incorporated, the ISEW (and therefore the ISEW per capita) would have exhibited negative values for some years, as shown in figures 2 and 3.

Figure 3: The Importance of Unpaid Domestic and Care Work

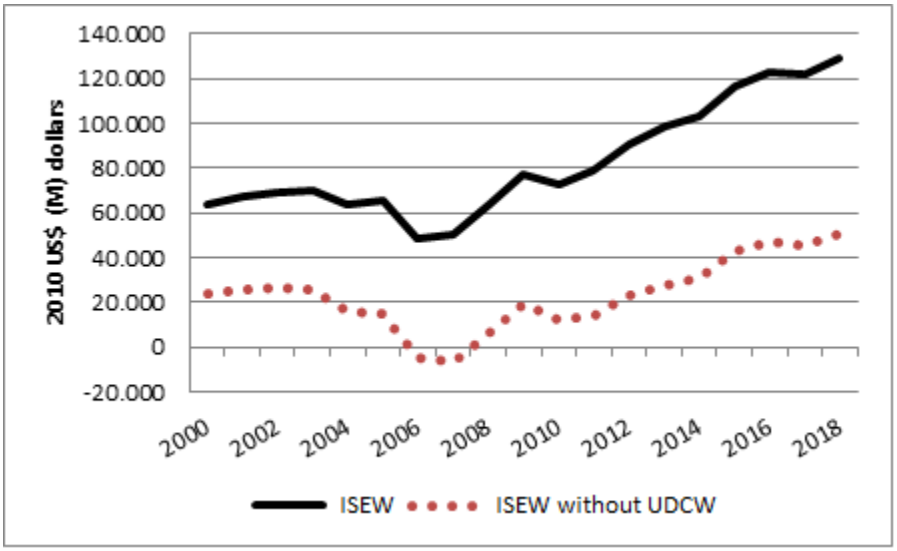
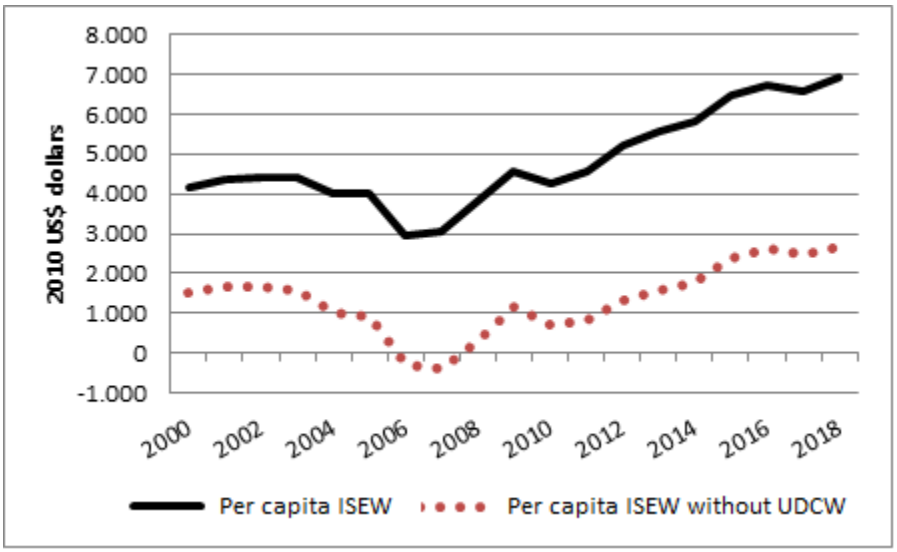


Figure 4:The Importance of Unpaid Domestic and Care Work



3.3 An unaccounted loss: The economic rent

The classical definition of economic rent refers to the economic remuneration that a specific factor of production receives in excess, i.e., above the minimum payment required to continue to put it to the same use. Considering all factors of production, the economic rent associated with a productive enterprise can be understood as the payment that exceeds the minimum amount necessary for it to remain in each economic activity. For a discussion of theorigin and subsequent theoretical development of this concept, see the letters of David Ricardo,1810-1815, compiled by Piero Sraffa (Ricardo, 2005), the literature review by Tollison (1982), and studies by Shepherd (1970) and Hammes (1985), among others.

In the concept of economic rent, the opportunity cost of all productive resources used is already discounted. Since opportunity costs incorporate the profit that would have been obtained by putting the resources allocated to a certain activity to the best alternative use, economic rent represents a surplus over and above the profit necessary to allocate the resources to the activity in question. In simpler terms, rent is the amount left over from the value of production after deducting all costs, including the normal return to capital and premiums for relevant risks.

An important feature of natural resource-based economies is that they tend to generate large economic rents, which can swell the return to the capital that exploits them and raise it to levels well above normal profitability. The economic rent generated by activities where natural resources, (renewable or non-renewable), are extracted directly, constitutes the scarcity value or in situ value of those resources. It follows that this rent is what can be legitimately charged by the owner of the natural resource to whoever uses it in a productive process.

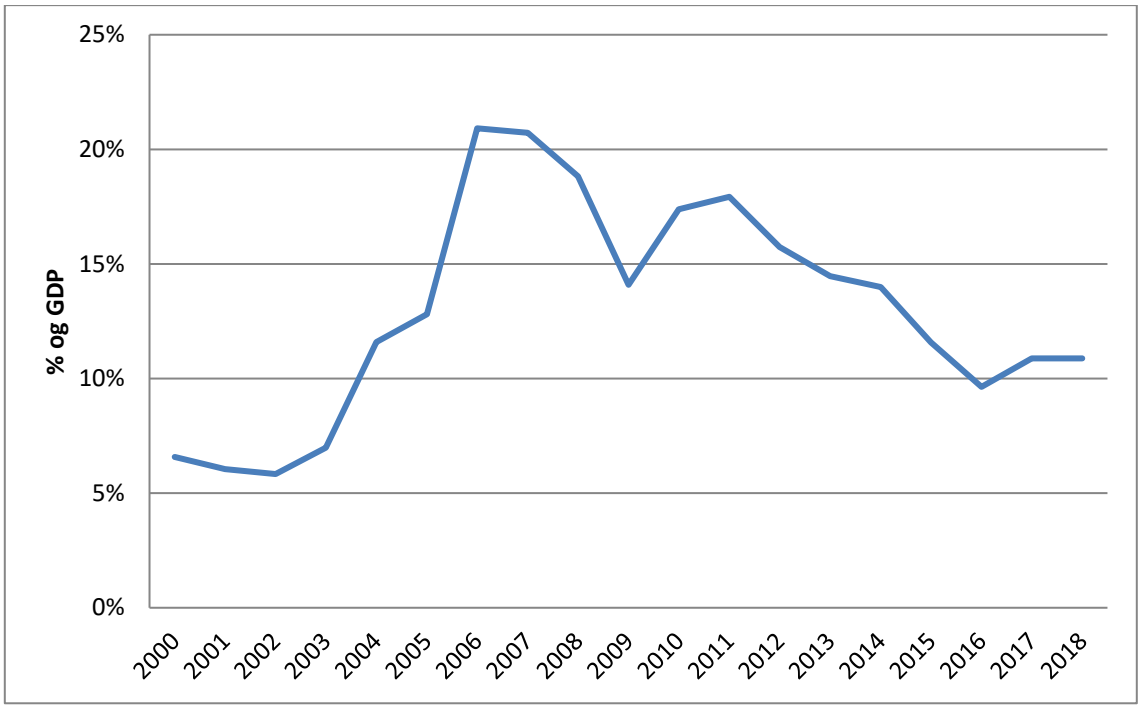
A few years ago, a study appeared called "The Changing Wealth of Nations" (World Bank, 2011), which states that when countries exploit non-renewable resources, they lose wealth and hence also lose a flow of income, and that is what is not being accounted for.

Rent is everything that remains after the economic activity has been carried out and all productive factors have been paid their contribution to the activity; that is, it is the surplus that remains after, and beyond, paying all costs and taxes. That is, over and above profit.

When economists talk about paying resources for their contribution to activity, we talk about paying what we call their opportunity costs, which include the gain in the best alternative use of resources. So, economic rent is what is beyond what the resources would earn, even paying the economic utility they would have in the best alternative use of those resources. In other words, economic rent is, basically, that wealth that is produced over and above the payment to the factors, and that one can take away from the economic actors, and they will continue doing the activity as if the rent were not taken away from them.

As noted above, for natural resource-abundant countries it is essential to properly measure the depletion and degradation of natural capital if we are to have a measure of sustainable economic welfare. The error of GDP is to quantify a loss of wealth as if it were a net income flow gain. ISEW instead recognizes that stock loss beyond what is necessary must be properly accounted for with a negative sign. By converting this stock loss into an annual flow, we obtain what in economics corresponds to the *rent of the natural resource*. In the case of Chile, practically all this rent corresponds to the rent of the mineral resource (Sturla, et al., 2018,Leiva, 2020,Jorratt, 2021)

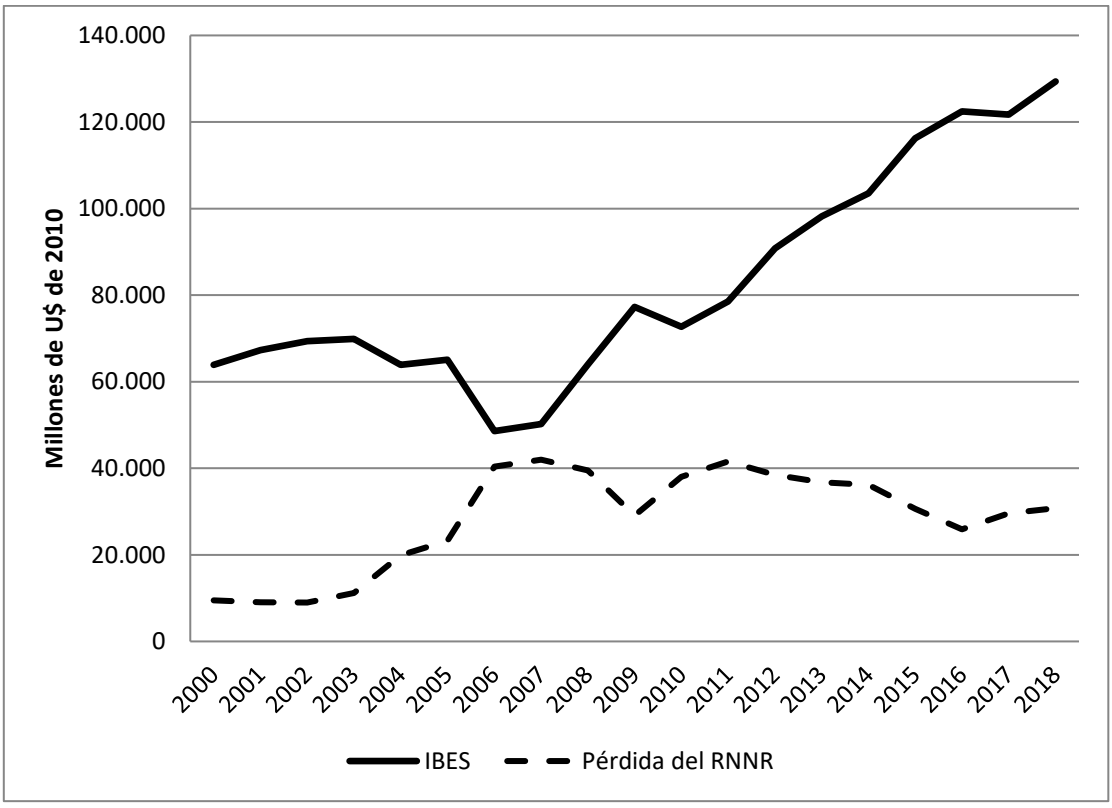
Figura 5:Income loses for Non renewables natural resources depletion (% del GDP)



Source: data.worldbank.org

For the period considered, this loss represented, on average, 13% of GDP, reaching a maximum of 21% in 2016 (Figure 5). When analyzing Figure 6, the relationship with ISEW is evident. For much of the period, about 80% of the fluctuations in ISEW are due to the depletion and degradation of the stock of natural capital, i.e. we are leaving future generations much less than they are entitled to, in a kind of "intergenerational ethical blindness".

Figure 6:The ISEW and the loss of revenue from the depletion of the non-renewable natural resource

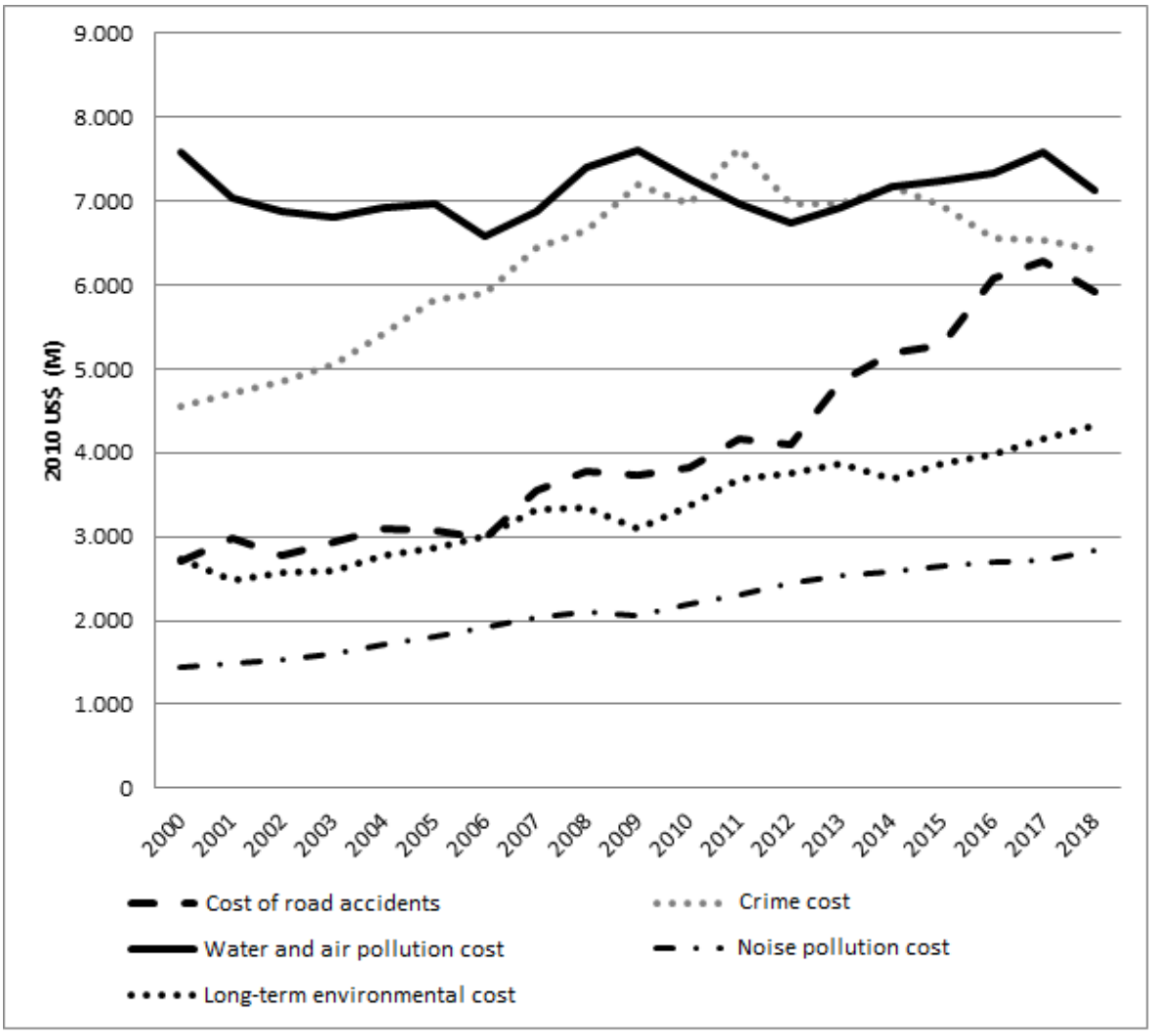


The only way in which this rent is not subtracted, or rather the only way to "compensate" for this loss, is to use it to increase the stock of other, scarcer capitals. In the specific case of ISEW, this would be achieved by investing in human capital, mainly education and public health, in the ecological/energetic transition and in the recovery of natural capital. It would also be achieved by investing in measures to reduce inequality, in public infrastructure (schools, urban transport, cycle paths, railways, for example) and to provide more and better productive capital to micro, small and medium enterprises (MiPymes), as this is where it would be most profitable from a productive and social point of view.

3.4 Other relevant costs

There are other relevant costs that need to be made explicit to obtain a proper perspective of the effects of economic growth. Figure 7 shows the evolution of some of these costs for the Chilean case. Most of them have grown in absolute terms in relation to the beginning of the period, apart from water and air pollution, which has remained relatively constant.

Figure 7: Other Costs that Decrease ISEW



Measured in relation to GDP, these costs have an important weight. For example, for 2017, the costs of water and air pollution reached 2.8% of GDP, the cost of crime was 2.4% of GDP, almost equal to the cost of road accidents (2.3% of GDP). Long-term environmental damage, measured as the social cost of CO2, amounted to 1.5% of GDP while noise pollution cost 1% of GDP. This adds up to a considerable 10% of GDP.

To give an idea of how the calculations are made, let us consider the costs of motor vehicle accidents. The National Commission for Safety and Traffic (CONASET) has estimated the cost that society incurs due to motor vehicle accidents, separating between damage to vehicles and the human cost associated with treating injuries and the loss to society of those killed. The breakdown for 2018 is shown in Table 1.

Table 1: Social Cost of Motor Vehicle Accidents - Chile 2018

Total Social Cost	**% of Cost**	**% GDP**
Vehicle damage	14%	0,30%
Associated with injured	86%	1,86%
%GDP		**2,09%**

Source: Data Observatory, National Traffic Safety Commission, 2019.

With these data it is possible to obtain an "average cost" of car accidents which is imputed to the number of traffic accidents reported by CONASET, and thus obtain the series for the whole period. The same is done for each of the sub-indicators. For example, the amount of CO2 emissions in tons is multiplied by the social cost of CO2, which is US$ 47 per ton (Mardones and Muñoz, 2017), to obtain the long-term environmental damage cost.

4. Implications for public policy

What has been analyzed so far has important implications for development strategies and for the design and implementation of public policies. Un adequate measure of a country's (sustainable) economic well-being incorporates other dimensions that make the notion of development more complex and define new economic policy orientations. Here we mention some of these orientations.

Emphasis on ecological sustainability. Talk of "sustainable development" should be dropped. Development is either sustainable or it is simply not development, since a path far from ecological sustainability is a dead end from humanity's perspective. Specifically for Chile, this implies a redefinition of the current "strategy" of natural resource exploitation, incorporating explicit criteria of ecological sustainability. In the case of mining, a first step is to incorporate the slogan "more value instead of volume" following in the footsteps of the strategy recently defined by New Zealand. This also entails the design of severe regulations and enforcement and the empowerment of communities through what may be called “ecological democracy”. This implies lower levels of CO2 and concentrate mining production, longer lifetimes for existing reserves, better jobs, and the possibility to apply science and technology in line with this "mission orientation", “The Green Copper”. It also implies capturing more of the mining rent that is given

away to companies year after year and reinvesting it in other types of capital, be it human capital (health and education at least), social capital and institutions, public infrastructure for development, and mitigation of the natural capital deterioration.

Rethinking economic growth strategy. This redefinition of the growth strategy must address Kuznets' question: More growth of what and for what? In the light of ISEW, structural change is needed to move towards an economy that minimizes CO2 emissions and generates lower costs associated with water and air pollution. This means a firm commitment to non-conventional renewable energies, where the state can play a relevant role in accelerating this transition. This can be done either by creating the right institutional conditions, through subsidies, R&D funding, and public-private joint ventures, or by developing projects through public companies such as CODELCO or ENAP. It also means a process of structural change towards an economy where clean sectors have a greater weight, promoting sectors that increase ISEW such as education, health, tourism, and the development of public infrastructure.

Emphasis on policies that reduce inequality. The development must also be sustainable from a social perspective. There is growing evidence of the pernicious effects of inequality on social welfare. Is inequality, rather than income levels, what explains social problems to a greater extent. This erodes confidence, and increases the levels of anxiety, insecurity, and illness. A recent study (Pickett and Wilkinson, 2010) comparing high-income countries finds that for the eleven social and public health problems examined (physical health, mental health, drug use, education, prison population, obesity, social mobility, interpersonal trust, violence, teenage pregnancy, and child well-being), outcomes are significantly worse in countries with higher inequality.

Even if we were concerned only with GDP, recent empirical evidence shows that high inequality negatively affects the growth rate (Berg et al., 2018, Dabla-Norris et al., 2015). Higher inequality induces weak aggregate demand and shortens periods of economic expansion, reducing households' consumption capacity. The study of Dabla-Norris indicates that increasing the income share of the poorest 20%, is associated with a higher GDP growth rate. They also find that increasing the income share of the richest 20% translates in the medium term into a lower GDP growth rate, suggesting that these benefits captured by the richest20% do not "trickle down" to the rest of the economy. They conclude that the poorest and middle-class sectors are the most important for increasing growth and that this occurs through a series of interrelated economic, social and political channels. From another perspective, excessive inequality can be the source of distrust between economic classes and can hinder the possibility of reaching broad social consensus, causing economic and political instability, which in turn could end up negatively affecting investment.

Social recognition of UDCW. This implies implementing public policies with the aim of ensuring that unpaid domestic and care work includes gender equality. In the Comunidad Mujer report mentioned above, it is proposed that policies should focus on recognizing, reducing, and redistributing unpaid care and domestic work. This recommendation is found in a framework of

policy recommendations called "the five Rs" proposed by the International Labor Organization. The remaining two R's would be reward and representation.

ISEW as a guide for economic policy. New Zealand's effort to construct a fiscal budget guided by the pursuit of citizen welfare rather than GDP maximization is a step in the right direction. Although it does not explicitly use ISEW, it does address many of the dimensions mentioned here and includes others that we have not considered. It establishes an approach that goes beyond the expansion of financial/productive capital, focusing on people's quality of life, with a view that incorporates an intergenerational and long-term ethic. Thus, the "Wellbeing Budget" (New Zealand Treasury, 2019) establishes five priority lines of action: (i) taking mental health seriously, (ii) improving child welfare, (iii) supporting Maori. (iv)building a productive nation and (v) transforming the economy (sustainability). In this way they hope to embrace and incorporate into their public policies the 5 non-negotiable principles suggested by the new Welfare Economy: dignity, restoration and protection of nature, connection to the common good, justice and participation.

This requires addressing one of the main shortcomings of ISEW, which is the lack of systematized data and the development of a reasonably accurate methodology, as the final calculation of this indicator may depend critically on the methodologies used to estimate costs and benefits, on the decision of which costs and benefits should be incorporated, and on the availability of reliable data and studies.

"*When we change the way we look at things, the things we look at, change*". It is needed and urgent change of view from politicians, economists, the media, and citizens in general. But this effort must be accompanied by an institutional structure capable of systematizing and constructing official series from which to build this kind of indicators, like the ISEW. This implies a joint effort by several public and international institutions but could be based in the research department of the Central Bank, the Ministry of Finance, or the Ministry of Social Development. The preparation of an annual public report and its dissemination will also be key to the acceptance, understanding and validation of this new indicator. This is important particularly for Latin America in order to have a complete vision of development processes and to abandon the GDP fetishism that still seems to be the prevailing paradigm.

US Senator Robert Kennedy, several years ago (1968) noted:

Our Gross National Product counts air pollution and cigarette advertising, and ambulances to clear our highways of carnage. It counts the costs of the security systems we install to protect our homes and the prisons in which we lock up those who break into them. It counts the destruction of our forests and the loss of our natural wonder in chaotic sprawl. It counts napalm and the cost of a nuclear warhead, and armoured cars for pólice who fight riots in our streets. It counts rifles and knives and the televisión programs, which glorify violence in order to sell toys to our children.

Yet, the GDP does not allow for the health of our children, the quality of their education, or the joy of their play. It is indifferent to the decency of our factories and the safety of our streets alike. It

does not include the beauty of our poetry or the strength of our marriages, the intelligence of our public debate nor the integrity of our public officials.

It measures neither wit nor 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"

Robert Kennedy was assassinated a few weeks after saying these words, and "declaring his intention to restore the importance of what makes life worth living".

One of the challenges in constructing a new economic narrative is to redefine what is meant by social and economic progress. This redefinition implies a wiser understanding of the relationships between the economic-productive sphere, the well-being of the human spirit, inequalities and the sustainability of the ecological environment that makes our lives possible. The indicator presented here, and the reflections put forward, fall short of the breadth and depth of the task required, but we believe it is a necessary step in the right direction.

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