Purpose: This paper seeks to introduce an accounting methodology towards reparations, highlighting how the intemerate equation can be used to provide for systemic economic and ecological justice.

Summary: While monetary acts of reparations attempt to fulfill some spirit of justice, it is debatable as to whether a value-based accounting of loss, by itself, is a just metric for reparations. Reparations must provide for the kind of systemic change necessary to break out of cycles of unjust behavior, and seek to restore, repatriate, and repair the damage cause by systemic abuse and violence. Myriad issues around economic and ecological justice are both historically determined and reinforced through institutionalized legal and economic regimes predicated upon the incoherent principles of an already shaky foundation of private property, exclusion and the free market. It has been long evident that this system, while privileging a few has dramatically failed the wider population and the sanctity of our ecological biodiversity. If we are to prevent a climate collapse, it must include redistributive tax policies that provide for greater global equity amongst peoples and regions, a much stronger regulatory regime to reverse climate change, and the global incentive to restore our ecological biodiversity. The spirit of justice embodies systemic change and if we are to break out of these hegemonic cycles, we need to promote something transformative, something that will allow us to transition from one system to the next. The introduction of a new accounting methodology could be the very tool used to promote ecological and economic justice. As we approach the intemerate equation, we must ask whether we can tangibly hold this equation up as a mirror for Truth and Reconciliation, and pave an accounting of reparation that embodies the true spirit of Justice.

As a recommendation, this paper proposes a proof-of-concept program, applying the intemerate equation into how we account for reparations and restore our ecological biodiversity.

In Mircea Eliade's "Myth of the Eternal Return," he describes a "terror of history" that at face value, exposes the difficulties of historicism as a cyclical series of repeated events that overflows with "evil," with warfare, injustice, sufferings and annihilations.¹ How do we contain the endless examples of violence and campaigns of terror, genocide, slavery, theft, fraud, exclusion and the ongoing dispossession of people from their land and resources? We would have had to be left out from the Enlightenment or the Age of Reason if we are to believe that the cycle of dispossession and abuse is part of a sacred natural cycle. How then are we to believe that laws and regulations that seek to compensate or criminalize abuses we discern as

¹ Eliade, Mircea. The Myth of the Eternal Return. Translated by Willard R. Trask, Bollingen Series XLVI, Princeton University Press. 1991. Pp 146-150.

evil or unjust are controversial, unless there is embodied within the system a perverse notion of justice that privileges the accumulation of wealth and power.

While Eliade is often associated with his support for fascist or nationalist campaigns, his analysis over the sacred and the profane draws into question the very contradictions of whether we approach history as a system predetermined by cyclical cultural narratives or as a linear series of events. In his study, what Eliade does in his conclusion is tricky. As the rational solution for transcending the cycles of history, he introduces the Hegelian dialectic, the linear progression of thought and action promoting an ever forward advancing discourse of history. As with many who engaged with the discourse of history at this time, Eliade follows that up by expressing the spirit of the dialectic down to the practical application of Marx's program of historical materialism, anchoring the dialectic down to the practical conditions of labor, wages and the social sciences. Then, strangely, commensurate with his support of fascism, Eliade undermines the practicality of this logic by aligning Marx's application as "militant," as if the promotion of faith were an innocently benign program in the history of colonization and systemic inequality.

What Eliade refers to as the terror of history, is an existential trap that seeks to locate our will within the confines of the archetypes and repetition of primitive humanity. How we emancipate from that history, he concludes, "is through faith," and that through faith, "everything is possible for man."² What is challenging about this program, is that we are already seeing the terror of history impose itself onto a world that is currently confronting its extinction. This existential trap can on the one hand be viewed as a Thucydides Trap between China and the United States, where many in the west are pursuing campaigns for war as if it were already an inevitable conclusion for challenging the post-Cold War hegemony. Simultaneously, reversing climate change is something that cannot be postponed and the primary reason that we remain stuck in this terror of history, in this multi-fisted assault, is that there are forces that are invested in economic power that reject peace and reconciliation and seek to perpetuate the structures of hegemony, despite all the evidence that squarely locates the cause of our global disenfranchisement on these very same unfair hegemonic structures.

Emancipating us from this terror of history requires us to understand what is most critical of history, and that is the perpetuation of systems that enforces conditions of racism, colonialism and slavery, and justifies genocides and ecological degradation. If the context of reparations is to provide for justice, to equalize the impacts of our so-called evil, we should approach our relationship with time and history towards the practical matters that govern family, property, political, moral, judicial, economic and environmental organization.

In his *Thesis on the Philosophy of History*, Walter Benjamin writes that there is a "secret agreement between past generations and the present one. Our coming was expected on earth. Like every generation that preceded us, we have been endowed with a *weak* Messianic power, a power to which the past has a claim. That claim cannot be settled cheaply. Historical

² *Ibid*. p. 160

materialists are aware of that."3

And if we are to accept that our global existence is indeed one crisis of which Benjamin elaborates, then we must know that this state of emergency in which we live, "is not the exception but the rule."⁴

An accounting of restoration, much like an economics of history is only as tangible as how we value justice. This value is necessary if we are to stop the cycles of systemic violence that spiral with repetition through history as if it were an inevitable occurrence of anthropomorphic will. Restoration, as with reparation, restitution, or repatriation is not simply an acknowledgement of claimant's rights for return or compensation, it is a recognition that if we are to heal our planet, relationships and interactions and move forward with peace, justice and reconciliation, we must acknowledge that the terror of history is a dark shroud that perpetuates systemic cycles of violence.

It is not enough to say, for example, that monetary compensation for seizures guided by misguided institutions of law are enough to reconcile generations of abuse, exclusion or land and resource theft. After all, the issue around systemic transgressions may not simply be resolved by individual arbitration claims, but rather by a restoring of rights and claims. One of the problems, however, is legal jurisdiction and simply deciding what law to interpret, what court, and what compensation may be insufficient for ending systemic bad behavior.

For a country like the United States, for example, whose evolution cannot be separated from genocide, slavery and dispossession, acknowledging this history does little for ending policies that perpetuate systemic racism, class struggle or gender inequality. Some of President Biden's recent Executive Orders addresses this very issue by promoting diversity, equity, inclusion and accessibility in the federal workplace and has already addressed the advancement of racial equity by supporting underserved communities in the Federal Workforce.⁵ While the Federal Workforce only accounts for about 2 million people—or about 1.25% of the total workforce, the Executive Orders are at least an acknowledgement of the systemic failure of present-day Capitalism, and the abuses of liberalization in our trade, tax, and investment policies.

The admission of wrongdoing is simply a first step in restoring a pathway to dignity and justice. But even with an admission of guilt, there are far too many who continue to believe in the

³ Benjamin, Walter. *Theses on the Philosophy of History*. Illuminations. Translated by Harry Zohm, Schocken Books, New York. 1969. P. 254.

⁴ *Ibid*, p.257.

⁵ Federal Register. <u>Executive Order 14035</u>, *Diversity, Equity, Inclusion, and Accessibility in the Federal Workforce*, June 25, 2021; <u>Executive Order 14031</u>, *Advancing Equity, Justice, and Opportunity of Asian Americans, Native Hawaiians, and Pacific Islanders*, May 28, 2021; and <u>Executive Order 14008</u>, *Tackling the Climate Crisis at Home and Abroad*, January 27, 2021. National Archives, United States Government.

agency of power as being the justifiable motivation for perpetuating bad behavior. We must, as a matter of practical concern, regulate the bad behavior of ideologies that perpetuate the Herbert Spencer's fiction of the Social Darwinist's "survival of the fittest" trope, when its opposite—"mutual aid"—is the verisimilitude of our natural interactions, and the greater natural law.

Thomas Piketty's Capital and Ideology reminds us exactly why, for example, the assault by conservatives in the United States wants to ban Critical Race Theory from the public school curriculum. Confronted by the extreme inequality of our present economic system, Piketty has provided us with the most inconvenient truth, which is that the dominant economic system is the inheritor of slave societies, of colonial societies, of ownership societies. If we are ever to move beyond the crisis of gross inequality, we need to rethink global economic strategies, beyond 20th century monikers that reinforce Cold War thinking. Such strategies are not only possible but should be desirable. Additionally, the rubric against the promotion of implementing systemic change, is not a lack of Public Will, it is law, international treaties and a taxation system that does not allow for just and equitable redistributive wealth.

In practical terms, an economy of history and an accounting of reparations are intangible targets that may seem impossible to quantify in the context and otherwise disparate history of justice issues, particularly since except for a few examples, history is bereft of reparation schemes and a methodology for compensation.⁶

Intemerate accounting is a tangible equation that measures ecological offsets by referencing current environmental data with historical environmental data baselines. How this relates to systemic reparations is that it provides a pathway for ecological and economic justice that can be an important economic tool for developing countries and underserved communities.

For local, indigenous, customary and impacted communities, this equation adopts a data baseline with which communities can use to record and measure changes in the ecological offsets, valuing these changes towards restoration. Factors such as time, population, and area are uniquely valued, and it is precisely these unique individual value sets that will be recorded and potentially monetized according to state laws and regulatory frameworks.

[three examples of how intemerate accounts can be used to address contemporary issues of reparation.]

⁶ The recent past (Japanese-Canadian internment and Jewish European deportation) does provide some models for reparations, as does Japanese interns and some of the cash pay

If we are to apply a strict accounting methodology that is based on the ledger of receipts, profits and losses, there are a plethora of historical details in published records that could be used to fix a price point over the values of, for example, human trafficking, slavery, industrial slaughter, extraction, and infrastructure development. And while these ledgers can provide expansive details in historical accounts that coincide with tremendous profit gains for industries, corporations and individuals, the value of genocide, slavery, theft, fraud, degradation and depletion will only be valued as the profits gained. What does the act of reversing or inverting the flow of capital really amount to, other than to provide a numeric value of something whose value should really be sacrosanct. If what is sacred is life, our ecological biodiversity, the mutual aid amongst natural systems, the wellbeing of peoples and planet, then it would stand to reason that reparations based on the ledger of receipts is tremendously undervalued, and that if we were to invert the flow of capital throughout the terror of history, how we value ourselves and our interactions with the world would be equally undervalued. And it stands to reason that if those who have been displaced undervalue their own worth, or inversely over-value the privilege of wealth accumulation, then how can we properly recognize the conditions of impacted or displaced people, when we know darn well that it is precisely those who are on the margins may be most in need of access to infrastructure, if that is what they choose.

As a debt relief... consider the percentage of growth possible for local remediation services, technologies, R&D, management and security. Treated as expenditures, many of these sectors will help build a country's GDP providing access for more revenue generating infrastructure benefitting local communities.

Having said that, by the way, is not to discount the importance of monetary awards as acknowledgement of an injustice, but we need to be clear that monetary awards are not reparations. Cash settlements are a legal recognition representing an apology for genocide, slavery, theft, fraud, exclusion and general disenfranchisement. Reparations, on the other hand, is a return, or at least a pathway towards reclamation, restoration, restitution, repatriation, and self-determination. Why this is a necessity for global peace and wellbeing, is that the acknowledgement of wrongdoing is not enough to end the cycle of human or ecological terror, reparations provide a commitment that allow peoples and communities the flexibility to fix and to heal with new systems of economic and ecological governance.

One tool that we can use to measure an economics of reparations is the **intemerate equation**. While the design of this equation still requires a proof-of-concept, what is contained in this simple formula is a way to measure and account for our interaction with restoring our environment.

$$\mathsf{N} = (\Sigma \left| \frac{(\mathrm{xi} - \mathrm{xo})}{\mathrm{xo}} \right|)$$

What N represents is the difference between where we are now and what we seek to restore. Essentially it is a derivative of time, and the value of N equals the measurable data offsets of restoring the displacement of a particular condition, whether it be our ecological biodiversity, a return of a peoples indigenous or customary relationship with a place, or access towards the rehabilitation of impacted communities or neighborhoods. What is measured and valued are the offsets. *What has real value is the velocity with which our interactions with environments and each other are measured*.

How this is financed will initially require a kick start but developing an index and exchange will have the potential for reaching wide and sustainable capacity for market trades. Although the regulatory and auditing rules might differ from current SEC rules that privilege large banks and investment houses, the financial benefits for this exchange would instead provide access and privilege to peoples and communities. While this financial scheme is based on an already existing system of investment and exchange, this being a reparation scheme puts the management of their data in their own terms and processes.

The function of the marketplace will be comprised of agents "packaging" intemerate offsets in new, ecological and justice based financial markets, which, like the formation of any other market, would be initially subsidized through payment schemes such as the ACP-EU or private equity funds participating for ESG accreditation, or any other financial institution that would integrate an ecologically based accounting scheme. What will most differentiate a change from this market from any other financial market traded on public exchanges, are the regulatory tools that will mandate that this exchange ensures equitable privilege with just and fair access by indigenous, customary, and impacted communities and that the data is owned or managed by the participating communities.

What the intemerate equation provides is a coherent equation that values peoples interactions with their environment.

In its most basic—one that is disaggregated from the wider promotion of an intemerate accounting index—the intemerate equation can utilize an input-output table to measure the cost against the outcome in a timeline. While the cost factor might disregard potential risk due to climate change of other unforeseen conditions, this will provide a basic standard measurement without the cost of insurance or projected loss.

There are many examples that we can already use, most notably, for example, the US EPA SuperFund program that provides a comprehensive guideline for the cleaning up of toxic sites. The problem, however, is that the original funding of this program has expired.

requires both a bidding process and public-private funds to engage in the restoration of sites. While I believe that governments should pay, the government no longer has the kind of equitable tax structure earmarked for managing restoration. Additionally, if governments are unable to enforce corporations or industries to pay for remediation without further impacting consumers, then even with the best intention, the potential capacity for these kinds of remediation or restoration programs will be limited.

Additionally, if the SuperFund program relies primarily on government contracts that follow a bid process that primarily awards private or public-private service contractors, then—at least in the US-- SuperFund areas fall under a management scheme . In this scenario, the people are disenfranchised from productively participating in the economy, unless they are only employed or a consumer of whatever public good the restored area provides.

(include super fund data)

With the intemerate accounting scheme...

In 1980 the US Congress passes the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), informally called Superfund. It was originally funded by a tax on the chemical and petroleum industries, but that tax expired in 1995, and now the money for the Superfund program has come primarily through appropriation from the general revenue. Earlier this year U.S. PIRG (Public Interest Research Group), published a report on how the underfunded Superfund have left taxpayers with a toxic financial burden. As appropriations have decreased over the past two decades, cleanup has slowed, putting more people at risk from hazardous contamination, and how annual appropriations has decreased from \$2.3 billion to just under \$1.2. billion, leaving a number of projects from the EPA's National Priorities List unfunded. The problem is that threats of extreme weather due to climate change increases the potential of spreading toxic pollution to nearby communities, endangering human and ecological wellbeing.

Currently there are over 1300 Superfund sites in the US and territories, with about 500 more recommended for inclusion into the National Priorities List. While some of the potentially responsible parties (PRPs) have fulfilled their commitment, some have not—as overwhelmingly it is the U.S. military that have been most derelict in completing the cleanup.

This Policy Paper has three goals. First, it seeks to make a case for implementing an intemerate accounting program using an equation to account for systemic ecological and economic violence. Second, this paper begins to critically analyze local attempts at restoring our ecological biodiversity by government agencies and ESR accreditation programs in our private sector. Third, it attempts to promote a practical solution for funding reparation programs this is fair, just and equitable for both the global economic system as well as indigenous, customary, and impacted peoples and communities.

where the Monetary Equivalence is the sum of an economy's Regional Assets [®] and Ecological Assets (V)

Intemerate baseline

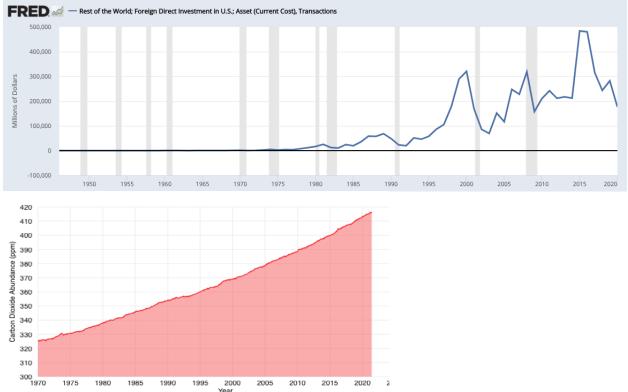
$$\begin{split} M\Sigma &= R + V \\ R = W \ x \ Z \ where \ W \ might \ be \ 60\% \ or \ .6 \ and \ Z &= (\$33.4 \ billion) \\ V &= Q + K \ (Equalization + Impact \ Factor) \\ Q &= Z/P \ (GDP \ of \ High \ 18 \ OECD/ \ divided \ by \ Population) \\ K &= A(CxN) \ Impact \ Factor = Area \ x \ CO_2 \ x \ N \end{split}$$

The UN Statistical Division, with their System of Environmental and Economic Accounting (SEEA) has been working on an accounting framework that would ultimately replace GDP.

When the SEEA, published its 1993 Environmental Economic Handbook, it captured the original spirit of the World Commission on Environment and Development by identifying the common concerns and challenges that would come to impact our world. Those who testified at the hearings of the conference understood that strong environmental government policy would be necessary to begin to reverse the damage caused by anthropomorphic abuse. The SEEA began to explore that an accounting revision of our GDP was going to be necessary and that an

economic-environmental accounting methodology would need to be implemented if we were going to reverse climate impacts. One of the fundamental challenges was how to account for Environmental Degradation and Resource Depletion (ED/RD). By accounting for them as deficits to our GDP, would, by itself begin to reverse the factors leading to climate change, however, it was also understood, that this accounting revision would lead to an abrupt end to the rampant industrial growth and profit margins of industrialized economies.

In 1993, the SEEA handbook was not the only publication that came out of the UN Statistical Division, it was also the year that we saw GDP revised for National Accounting Systems. This accounting revision was harmonized with new investment frameworks that advanced the kind of free-market motivation growing from the neoliberal Washington Consensus, a meeting of primarily the OECD grouping of international financial institutions that was responding to the collapse of the Soviet Union and the countries that were dependent on them. From the perspective of industrial government policy makers, weighing the free-market economic benefits of global liberalization and deregulatory environmental and labor protections against environmental degradation and depletion was not much of choice and if we consider the growth that of the neoliberal economy from 1993 to the present, there is a direct inverse correlation between, for example Foreign Direct Investment and the rise of CO2 PPM in our atmosphere:



INSERT GRAPHS

While there are many more indicators that just these, this does provide a fairly straightforward understanding of how the emphasis of our industrial policy by our national accounting systems has exacerbated our climate security. The FDI graph, also highlights some of the very real geopolitical motivations that has struggled to keep international investments solvent, with obvious dips after 9/11, the 2008 financial collapse, and the COVID pandemic, for example.

The SEEA has had to continually respond to geopolitical economic conditions. With every iteration from the publication of the 1993 EEA handbook, to the 2003 SEEA, up to the latest SEEA revision when the 2012 framework was published, the language around ecosystem accounts has evolved to promote investment and finance rather than our ecological biodiversity.

In the 2003 framework, for example, developing countries would have far greater equity if we began to include environmental degradation and resource depletion as deficits. However, by 2014 when the SEEA framework was adopted, the advanced economies saw to it that degradation and depletion would remain as assets until new privatization schemes could be adjusted to account for green and blue environments. Advanced economies are harmonizing accounting and environmental policies to leverage their carbon credits, thereby ensuring that in time, developing countries would be shut out from accounting their own ecological biodiversity through privatization management schemes.

Harmonizing with the SEEA, all of the 17 SDGs and the Paris COP include a number of statistical indicators, many of which could be used to advance the economic weight of environmental protections, household work, rights-based evaluations, full-employment factors, food and water security, and health, all measurements that could create far more equitable measuring between the advanced economies and the developing countries and emerging economies, if we moved away from consumption as being the highest weighted indicator.

One of the caveats that has become very apparent over the last few years is that we are in the midst of a geopolitical struggle, looking to write the rules of the global economy. After the 2008 financial collapse, while there is an understanding that neoliberalism has severe unsustainable limitations, the motivations for perpetuating that program continues to dominate many of the political and economic decisions taking place within the international development agencies. Environmental Accounting is now determined by Ecological Services, and what we are seeing is an eco-neoliberal push for industrialized economies to begin the transition of dominating an environmental economy at the expense of developing countries' ability to steward and account for their own economic interactions.

Since the signing of the Paris COP and the formation of the SDGs, China has aligned its development priorities to meet these goals. While there has been some contestation over China's motivations, we have seen institutional support from, for example, the WTO to exempt rules of trade that have put barriers against state-owned investments when it comes to

renewable energy technologies, just as it has with life-saving technology and goods to enhance global vaccine distribution against the coronavirus.

Understanding that the rules have not yet been set when it comes to ecological accounting, earlier this year, the SEEA launched their Artificial Intelligence for Environment & Sustainability (<u>ARIES</u>), developed by researchers at the Basque Centre for Climate Change (<u>BC3</u>). ARIES is an integrated, open-source modelling platform for environmental sustainability, where researchers from across the globe can add their own data and models to web-based repositories.

Using ARIES technology, the ARIES for SEEA Explorer application allows users anywhere in the world to produce rapid, standardized, scalable and customizable ecosystem accounts for their area of interest that are consistent with the SEEA Ecosystem Accounting framework. ARIES for SEEA is available on the <u>UN Global Platform</u>, a cloud-service platform supporting international collaboration in the development of official statistics using new data sources and innovative methods.

The SEEA platform, appears to be a useful tool for ecological-economic accounts, one that can be used under different economic systems, thereby escaping the political economic trappings of the current geopolitical system.

The new framework recognizes that ecosystems deliver important services that generate benefits for people. In essence, they are assets to be maintained, similar to economic assets. For example, forests play a role in providing communities with clean water, serving as natural water filters with trees, plants and other characteristics, such as soil depth, that help absorb nutrient pollution like nitrogen and phosphorous before it can flow into streams, rivers and lakes.

As governments to the Convention on Biological Diversity get ready to agree and implement a framework that will recraft our relationship with nature, this new framework will provide an impetus for an accurate accounting of the value of biodiversity" says Elizabeth Maruma Mrema, Executive Secretary of the Convention on Biological Diversity. "In so doing, it is a step towards sustainable development."

And while Intemerate Accounting was developed to counter eco-neoliberal motivations and create a more robust, a more just and equitable way for developing countries, it has become apparent—particularly during the pandemic—that this accounting methodology would benefit not just the Global South, but be a useful tool for impacted peopled everywhere, particularly as a reparations framework promoting greater ecological and economic justice.

The summary of comments on the SDG Indicator proposals are as much of a new economic and investment roadmap as it is a development goal.

Environmental data is bei trillions of dollars it will take to implement the SDGs will ultimately feed back into the pockets of transnational investors without building the kind of infrastructure that will allow communities to grow in alignment with their customary properties and traditional ways of life.

Primarily it was the US that rejected ED/RD as national accounting aggregate, claiming that it was too experimental (as a side note, the US pushed forward how we account for military systems based on an even more convoluted and experimental construct of valuing national security, justifying the move for accounting military systems from being a fixed asset rather than an inventoried account).

In harmonization with this summary, the UN Statistical Division has adopted a new national accounting framework called the System of Environmental and Economic Accounting (SEEA). This will be the new economic accounting matrix that will be impacting global trade and changing the way nations account for national economic health. At the moment, the accounting for resource depletion and environmental degradation have not been included, but following this report, they will be adopting some of the recommendations.

The caveat is that the US and the investment regime is in the middle of a massive privatization and reinsurance push, preparing to capitalize on this accounting shift. Since...

The SEEA Aries

https://seea.un.org/content/aries-for-seea

Earlier this year the UN Statistical Division

Ecological accounting is the foundation that we, as an interdependent global society, require to determine economic value and to safeguard that which cannot be given price. The SEEA and our preferred approach to ecological accounting both spring from the recognition of this fact.

This is because these values are unreliable indicators of the overall impact of production on our lives and our planet, being based on the exchange prices of labour, land and other factors or resources which are in turn skewed by exchange rates, historical conventions and the relative scarcity of the item in the market in which it is purchased and consumed.

As someone who has tangentially been following the SEEA for about 15 years, I applaud the original spirit from the 1993 Environmental Economic Handbook, but with every iteration from 2003 up to the latest accounting revision, really when the 2012 framework was published, the language around ecosystems promoting investment and finance rather than our ecological biodiversity suggests a geopolitical tool to reinforce the neoliberal freemarket. China's implementation of the SEEA is likely to be a counterweight and we can already see the fight brewing with the US BEA/USGS/EPA response to the recent draft revision.

This is not to say that valuation is going to be determined by extractive or commodity aggregates, but that a large chunk of that value is going to be coming from Marine Protected Areas. When we speak about MPA, we should think about the OPEC States and how they were able to leverage a region into an equitable member of the global economy. I would argue that the window is still open for the Pacific to work within the UN Statistical Division and participate in the building of the SEEA framework

Those numbers are based on an accounting convention that the SDGs are seeking to revise, and that is how we measure GDP.