NEMO IMS

NEguentropic MOney International Monetary System

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www.nemosmi.org

Introduction

NEMO IMS (NEguentropic MONey International Monetary System) is a proposal for an innovative, world-class economic system. This proposal argues that the dominant economic model based on a market order, growth, and debt will not allow us to achieve a balance favorable to the conditions of life on Earth. In contrast, our banking, monetary, and financial systems accelerate growth, extraction, and climate change. On a planet with limited resources, such a system can only lead us to disaster. The failure to achieve decoupling demonstrates that the notion of green growth is illusory. NEMO IMS does not present itself so much as a financial solution for a hypothetical energy transition as for an economy of balance between the criteria of human society and the carrying capacities of the planet (Doughnut Theory).

NEMO IMS offers a unique global monetary architecture that will enable sustainability, social justice, ecosystem balance between people and the environment, peace, and harmony between people, whatever their cultures, beliefs, colors, and origins. Every human being, every living being on our planet must benefit from conditions favorable to their sustainability. The prosperity of some must no longer come at the expense of others. The economy have to shift from devastating competition to constructive cooperation.

> *It is illusory to expect rentier finance, short-term and with a particular vocation, to finance long-term projects, common goods and with a collective vocation*

De-growth (or selective growth) is a term that can be off-putting. This fear comes from the organization of our monetary system for which taxes finance essential public services such as government, education, health, the welfare state, etc. It is a misconception that growth alone drives human progress because financing public domains through taxation requires an economy that is harmful to the environment. For this reason, NEMO IMS envisages a reduction in extractive growth coupled with the establishment of a regenerative economy. With NEMO IMS, economic success will also come from regenerative activities which will be financed by monetary creation ex nihilo and disconnected from debt.

Price stability will be achieved by mechanisms that destroy money in market and financial transactions. These melting mechanisms will incorporate ecological and social considerations. The idea is to withdraw money (and therefore financial income) where the most harmful areas of the economy and favor the most respectful areas.

Integration of Thermodynamics into the Monetary Concept

NEMO IMS acknowledges that our economic system is based on the continuous exploitation of natural resources. Our financial system is designed to support and amplify this extraction. We recognize that natural resources are not unlimited and that their exploitation causes multiple ecological and social harms, degrades biodiversity, and accelerates global warming.

The logic of ecosystem balances involves the idea of complementary opposites, but in our economic narratives, we only have "Yang"; we are missing the "Yin." Our monetary system is exclusively extractive, based on a simplistic view of the economy that prioritizes immediate tangible benefits and the maximization of short-term profits. NEMO IMS posits that bank money is entropic because its primary allocation, which is market-oriented, demands profitability and thus generally supports extractive processes that generate entropy.

Considering that the current monetary system is predicated on an unlimited increase in debt—and that this infinite debt is backed by the promise of infinite exploitation of natural resources—NEMO IMS proposes a solution for debt relief through processes other than extraction: solving financial debt with regeneration and preservation of the commons.

Traditionally, we view money as a tool that simplifies exchanges and is backed by objects of desire. NEMO IMS suggests that part of the monetary issuance be conditional on the realization of collective activities that are approved by a broad consensus and a global label.

Responding to our ecological and social challenges will require us to move beyond the concept of a single banking currency with an extractive vocation to establish a new global institution for the issuance of a currency backed by activities that regenerate the commons. If banking currencies are extractive (entropic), we must envision a dual system with the introduction of a currency that regenerates (negentropic) as a complementary opposite, bringing balance to the entire system.

Contrary to the conventional quantitative theory, NEMO IMS explains that money must be based on a permanent "dynamic" flow between the moment it is created and the moment it is destroyed. Entropic and negentropic money will be distributed by two institutions with different vocations—one extractive associated with banks and the other regenerative. They will operate under the same accounting framework, allowing the negentropic currency to generate reflux (accounting neutralization of the currency and the debt) on the debts of the entropic currency. In this way, we can reduce the burden of our financial debts while simultaneously addressing our debts to nature.

Bank Money : A Matter of Accounting

Many paradoxes and contradictions accompany the discourses of experts in monetary theory. Some argue that banks lend out savers' deposits to borrowers, while others view the fact that banks create money as either scandalous or fodder for wild conspiracy theories. Orthodox economists see money as a neutral veil, meaning they assume that the quantity of money in circulation has no influence on production or consumption, adhering to the theory of exogenous money.

However, the reality is that keeping money in a fixed quantity can lead to slowdowns, crowding out, and blockages in the economy. Perhaps surprisingly, NEMO IMS asserts that the monetary creation by banks is a normal, even logical, process. Banks create money to meet the constant needs of the

economy, supporting the theory of endogenous money. Thus, the monetary balance sheet necessarily increases to support growth.

Through credit, banks create money that does not previously exist to support the production of goods and services that do not yet exist. Generally, people believe that it is their deposits that make loans possible, and that banks act solely as financial intermediaries between depositors and borrowers. On the contrary, it is actually the issuance of credit that generates deposits; if banks did not continuously create money during credit operations, both savings and banks would not be remunerated. This issue was already a subject of controversy in the 1820s, during the debate between the Banking Principle and the Currency Principle. It is now accepted that banks create money to accelerate production and growth, for better or worse. Moreover, it is conceivable that without such banking practices, we might still not have completed the first industrial revolution.

The Myth of Sisyphe of Debt (The Compound Interest Trap)

Bank money should be viewed as a matter of accounting, with “+ balances” representing money and “- balances” representing debt. Currency and debt are therefore relative figures to each other. When a bank issues credit, it performs an accounting operation: it simultaneously creates a "+ balance" and a "- balance" of the same amount. The issuance of credit thus generates monetary flows at the same time as it creates debt. The opposite operation is known as the "law of reflux." When a borrower repays their credit, the positive and negative balances neutralize each other, similar to adding relative figures (-X + X = 0). Consequently, bank money and debt are temporary in the sense that their existences are limited to the ebbs and flows of credit transactions.

However, a portion of the debts remains and grows due to multiple factors, such as the accumulation of compound interest or tax evasion. In cases of tax evasion, the "+ balances" (the currency) that are hidden or moved will never allow a corresponding flow back to the "- balances" (the debts). The only solution to close these gaps is to continually issue new credits, thereby fueling a system where debt can only increase alongside the predation of natural resources.

Debt as a Promise of Future Extraction

According to NEMO IMS, the problem is not so much that banks create money ex nihilo, but that these commercial institutions alone hold this monopoly. This situation stems from the flawed notion that the economy relies solely on a large, efficient, and self-regulating market. Obligatory profitability in resolving debt typically drives extractive and harmful processes. This system, by its incompleteness—and due to the misunderstanding or incompetence of our "elites"—inevitably pushes the economy towards greater growth, increased pressure on natural resources, and climate disruption. These dilemmas arise from the belief that currency is neutral and fails to incorporate the essential concept of complementary opposites (thermodynamic balances) that are crucial for sustainability.

We have observed that a portion of the money created by banks is subject to destruction mechanisms (law of reflux). However, a significant part of the debts remains and grows due to factors previously outlined. Moreover, the accumulation of compound interest ensures that financial debts only increase, thereby intensifying the pressure on natural resources and society. This organization of our monetary system creates an "economic Sisyphean myth"—an eternal curse where financial constraints are in total opposition to the concept of strong sustainability. Currently, the cumulative total

of all debts (private and public) globally stands at 230 trillion US dollars (as of 2024). This figure indicates that an equivalent amount of natural resources must be extracted from the planet to produce goods and services to back these debts. If we succeed, we face an ecological catastrophe; if we fail, it will be an economic one : the bubble of everything.

> *We force ourselves to dig deeper and deeper holes in nature to fill bigger and bigger holes in our accounting sheets !*

But there's more: this Sisyphean curse reveals that even if we manage to produce and sell enough goods and services, the debt will not be extinguished. It will merely change hands, growing even larger with the accumulation of interest. This means the next debtor can only hope to escape their debt by further depleting planetary resources. Agony of our world is thus accompanied by the persistent veneration of that which kills it.

The Paradigmatic Curse Between Financial Debts and Planetary Debts

We owe a debt to our (only) spacecraft—Earth. Yet, traditional economic discourse focuses solely on financial debts, neglecting our debts toward nature. It is this plundering of nature that allow the production of goods and services backed by bank debts.

Often, the most profitable activities are also the most detrimental to our environment. The fundamental framework of our economy is productivist because commercial banks are the only institutions authorized to issue currency in exchange for debts. Ultimately, it is our planet that pays the price for the human economy.

Paying off our debts to nature would only increase our financial debts. Conversely, paying off our financial debts would only increase our debts to nature. At the core of our problem is the fact that repairing nature is not profitable, whereas its destruction is ! This mindset stems from past ideologies and cultures that have long viewed the economy from the perspective of an efficient and self-regulating market. These precepts are outdated ; there is also a non-market sphere that requires monetary financing and does not adhere to the criteria of profitability (at least, not immediate profitability). However, these investments would facilitate the preservation of ecosystem balances and yield greater savings in the long term—if there is anything left to preserve when disasters strike.

Debt-Free Money: A Weapon for Massive Debt Reduction

Standard economists often assert that money is inherently debt. This statement, although seemingly a truism, tends to create confusion. It would be more accurate to say that bank money is created simultaneously with debt and that, within this accounting logic, money is the mathematical mirror of debt, as previously discussed. This understanding paves the way for exploring deeper into reflux mechanisms with a debt-free currency.

The concept of a debt-free currency aimed at preserving the commons recognizes the fundamental value of planetary ecosystem services. NEMO IMS proposes backing these services with a global label, quantifiable in monetary terms. Thus, regeneration and nature protection should generate income in a currency dedicated to regeneration.

We have already noted that bank money is a matter of accounting, not physics. Furthermore, there is nothing inherently magical about money creation, just as there is nothing magical about accounting itself—there are no spells here, but there are conventions.

Employing a debt-free currency could simultaneously address our financial debts and those owed to nature, hitting two targets with one stone. We've observed that monetary creation by banks inevitably increases alongside debt, a consequence often misunderstood due to the complex accounting implications of compound interest and tax evasion. By our own oversight, we have fallen into an accounting trap; escaping it will require devising an accounting stratagem.

This stratagem involves issuing a debt-free currency earmarked specifically for projects that preserve ecosystem services and regenerate the planetary commons. Like a domino effect or trickle-down process, introducing a currency without associated debt could facilitate the reflux of debts, similar to international trade processes where foreign currency conversions into national currency cause a reflux on our debts.

Countries worldwide face similar dilemmas: excessive debt, unemployment, inflation, recession, crises of meaning, and the urgent need to regenerate planetary commons, preserve biodiversity, mitigate climate change, and maintain peace. Recognizing that none of the traditional economic solutions can address these issues may lead nations to accept that only a global and coordinated approach can provide relief.

The GAIA Economic Symposium

The GAIA Economic Symposium is an international institution established by the participating nations of the NEMO IMS project. It may affiliate with the United Nations or choose to remain radically independent as a geopolitical decision. Comprising experts and elected officials from all participating nations, its governance model will be both organic and democratic. The Symposium's primary mission is to transition away from fossil fuels and extractivism and to credibly support the preservation of life-sustaining conditions on Earth.

- The creation of the GAIA Economic Symposium marks a departure from policies and the traditional, ineffective ecological approaches. Through its ecological and social conventions, the Symposium aims to reduce the influence of fossil fuel and thermo-industrial lobbies and other activities that are detrimental to sustainability, balance, and harmony on Earth.
- The Symposium will have the authority to issue monetary drawing rights, known as “NEMO Green SDRs,” which will serve as payment for activities linked to the commons. These rights will be convertible at fixed rates into national currencies via NEMO SWIFT and will be immediately destroyed upon conversion.
- Democratic processes within the GAIA Economic Symposium will determine the income levels denominated in NEMO Green SDRs in exchange for extra-financial activities.
- The Symposium will conduct impact studies and establish ecosystem indicators. Its governance will operate on both Top/Down and Bottom/Up models, as accurate data and reports from local to global levels are essential. It will also develop specifications for service providers, issue calls for tenders, and select companies for these intentional contracts.

- In collaboration with central banks and other global institutions, the GAIA Economic Symposium will determine the annual allocation of NEMO Green SDRs to each nation based on macro-prudential, demographic, economic criteria, national monetary policy objectives, and their levels of debt.
- The institution will rigorously check the quality of services to ensure the NEMO IMS concept remains unblemished by cheating, corruption, or improper business dealings, thereby maintaining its moral and political integrity.

The NEMO Green DTS

Unlike the IMF's Special Drawing Rights (SDRs), which are a global currency distributed in return for debt, the NEMO Green DTS is a temporary, or even ephemeral (because immediately converted into national currency), currency distributed as income in return for recognized commons regeneration activities and their contributions to preserving ecosystem services and sustainability. Unlike traditional money philosophies, NEMO Green SDRs are not backed by materials or marketable goods and services, or debts. Instead, they represent the essential basis of everything ; if the commons collapse, so does this foundational base and, consequently, the entire economy.

- **Unit of Account** : NEMO Green SDRs are units of account backed by urgent and essential activities that are overlooked by standard market mechanisms. Monetizing these non-market activities eliminates the need for future taxation, freeing us from the "economic Sisyphean myth" previously described and providing governments with greater budgetary flexibility.
- **Purpose and Verification** : NEMO Green SDRs compensate for extra-financial activities and the regeneration of the commons, such as ocean depollution, reforestation, biodiversity preservation, and fulfilling UN sustainable development goals. These services are defined by precise specifications and undergo rigorous and impartial verifications.
- **Conversion and Income** : NEMO Green SDRs are converted by NEMO SWIFT into national currencies at a fixed exchange rate and are delivered directly as income to the demand deposits of service providers, similar to conventional international trade operations.
- **Ephemeral Existence** : The existence of NEMO Green SDRs is ephemeral, only spanning from their issuance to their conversion/destruction by NEMO SWIFT. They can be considered as units of account issued by the virtual country of the GAIA Economic Symposium and are destroyed upon conversion into a service provider’s national currency, much like other currencies during foreign exchange or international trade operations.
- **Exchange Rates and Distribution** : Fixed exchange rates between NEMO Green SDRs and national currencies follow the NEMO Exchange Standard (parity 1:1). These rates also determine the exchange rates between the NEMO Exchange Standard and national currencies. The quantity of NEMO Green SDRs distributed annually is decided democratically by the GAIA Economic Symposium, central banks, and national governments, and distributed according to national quotas. These criteria consider the demographic situation of nations and the urgency of transforming their productive infrastructures, proposing growth for emerging countries and strategic degrowth for developed nations.

- **Global philosophy** : Nations will obtain liquidity through negentropic activities and are encouraged to use them in the trade of low entropy-generating goods and services.

The International Monetary System with NEMO IMS

Within countries, the usual macro-prudential mechanisms largely remain unchanged. The NEMO IMS introduces two new global institutions to enhance the existing framework:

1. **The GAIA Economic Symposium** is responsible for organizing the regeneration and preservation of planetary commons. It proposes mechanisms for nations to financially organize degrowth and reduce competition driving to the predation of natural resources.
2. **NEMO SWIFT** functions as a global currency conversion institution for international trade. With NEMO SWIFT, currencies convert directly between each other, bypassing traditional key currency systems and foreign exchange reserves.

This new setup operates within the familiar framework of international trade, but with a significant difference: nations no longer rely on foreign exchange reserves such as the US Dollar, Euro, or Yen, which have led to numerous economic dilemmas (Triffin Dilemma, Mundell-Fleming Model, Exorbitant Privilege, dollar hegemony, currency wars, and the extractivist paradigm).

The shift towards degrowth (or selective growth) and sustainability necessitates moving away from the extractivist paradigm that currently underpins our global monetary system, which is primarily allocated to productivism.

Metaphorically, the GAIA Economic Symposium acts as a virtual country, created by international convention to represent and defend the interests of the planetary commons, which are essential for life. This "virtual country" does not require imports of goods but rather services that benefit the environment, such as depollution, preservation, and regeneration of biodiversity and ecosystem services, or sustainable development goals.

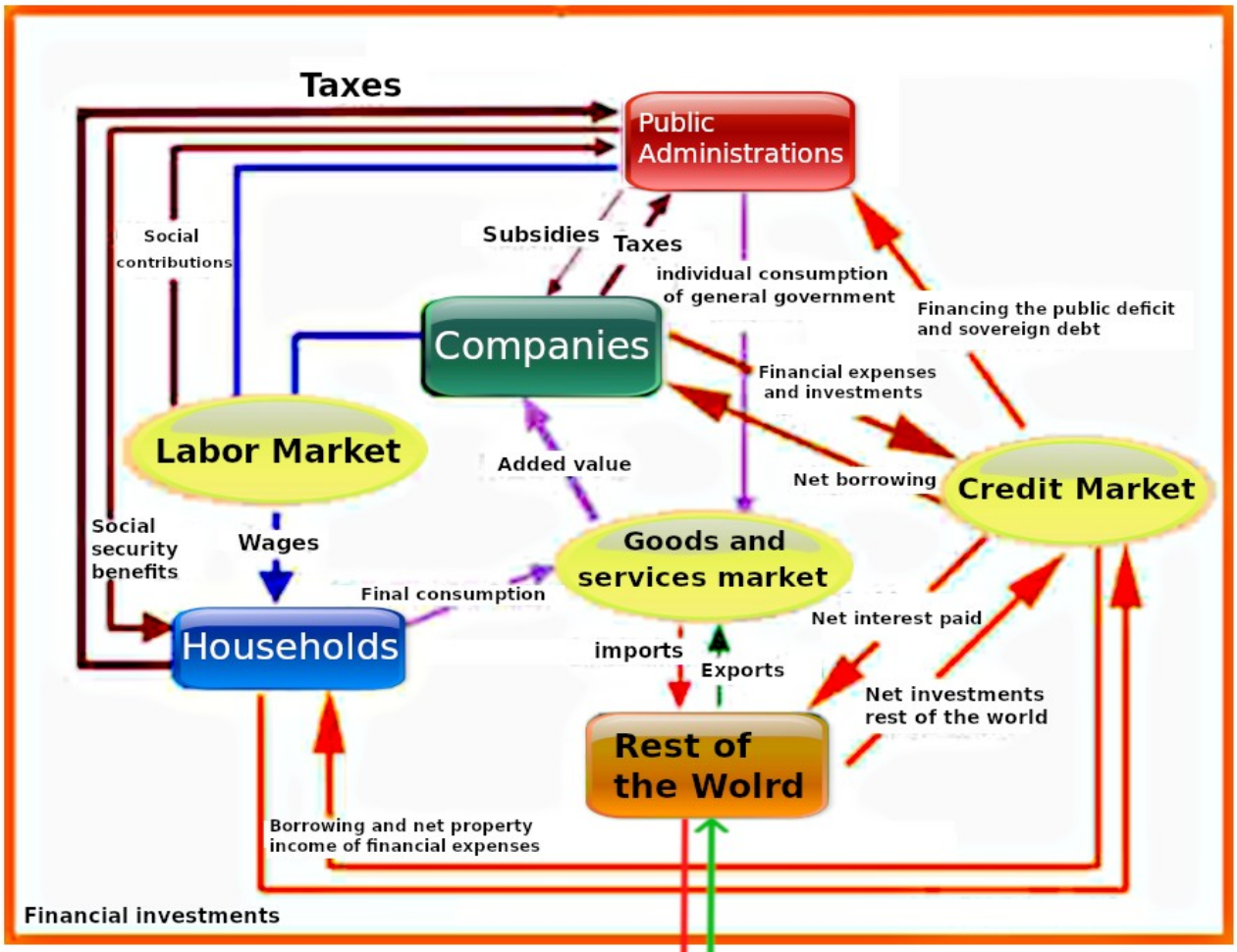
This "virtual country" is entitled to expand its balance sheet under the premise that it is supported by planetary “reparations” conducive to global sustainability. This highlights a critical dilemma in our current monetary system: paying off our financial debts increases our debts to nature, and vice versa.

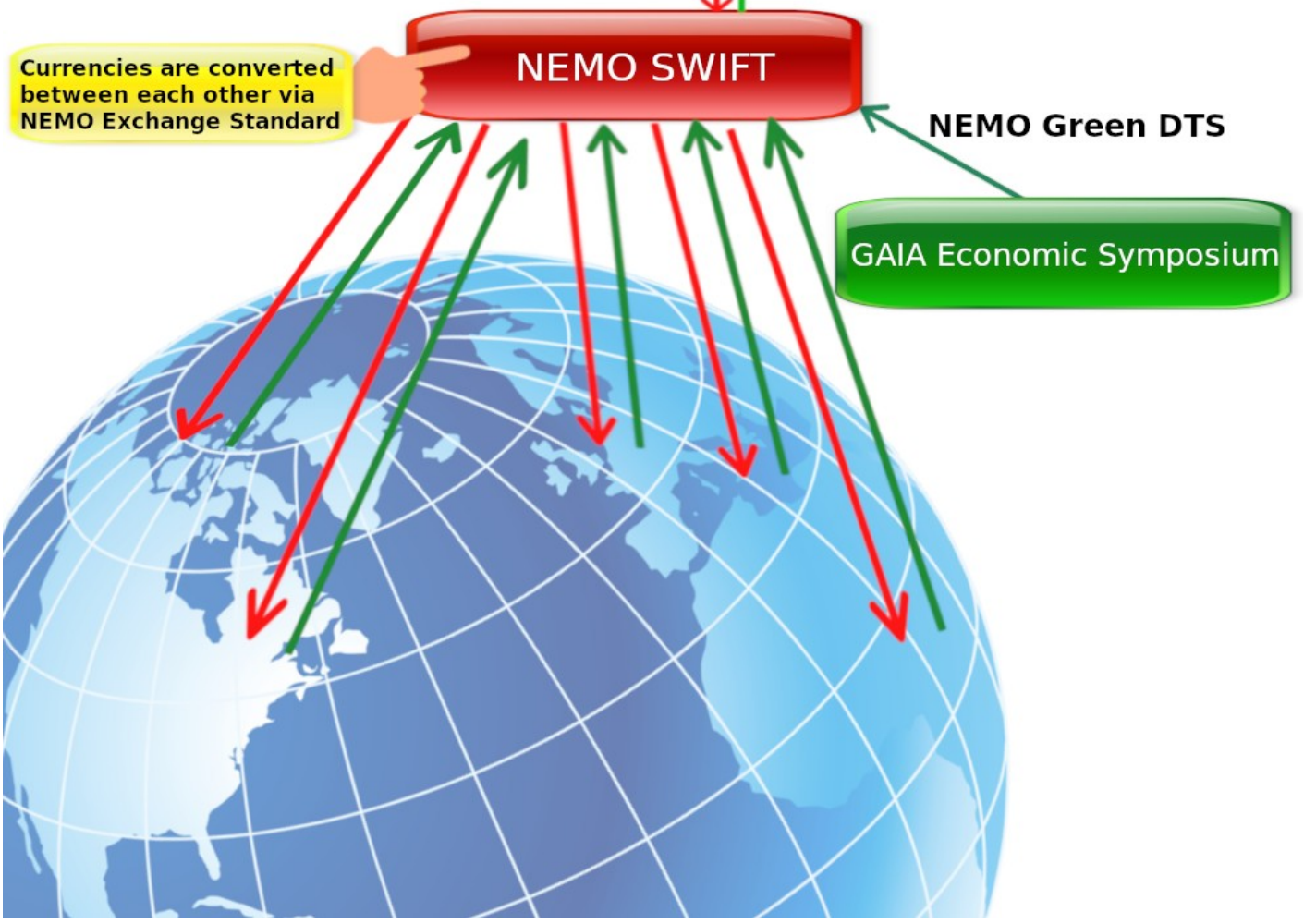
The concept of a virtual country serves as a "voluntary payer" for common good activities, compensating for what no country would typically pay for due to their primary currency allocation being extractive. The GAIA Economic Symposium, thus, finances essential but unprofitable activities as part of business as usual. It possesses the means to do so because, by convention, it creates a currency backed by planetary repair. This debt-free currency will help reduce financial debts by the mechanisms of monetary reflux.

We establish international intentional markets for the regeneration and preservation of the planetary commons. This strategy allows nations to rebalance their foreign trade balances without resorting to extractive activities.

The allocation of NEMO Green SDRs can be used to balance global trade and preserve life on Earth, effectively monetizing commons regeneration activities and ecosystem services through a completely rethought approach to international trade.

Representation of monetary flows





Organizing Exchanges with the NEMO Exchange Standard

The current international monetary system (IMS), based on key currencies such as the dollar, euro, and yen, is fraught with challenges, including Triffin's dilemma, Mundell's triangle, American hegemony, exorbitant privilege, the logic of globalized extractivist competition, currency wars, foreign exchange speculation, the dilemma of external constraint, spread of crises, and the curse of natural resources.

NEMO IMS proposes a shift away from this system to organize global trade in a manner that does not compel nations to harm the environment to produce goods for export, thereby challenging the economic Sisyphean myth of balancing foreign trade balances through destructive practices.

The international monetary system proposed by NEMO IMS is reminiscent of the Gold/Sterling standard of the 1820s. However, instead of a Gold Exchange Standard, we introduce the NEMO Exchange Standard. This standard serves as an international accounting benchmark, setting a fixed exchange rate against which all world currencies are valued. It's important to note that the fixed exchange rates between the NEMO Exchange Standard and NEMO Green SDRs in domestic currencies are exactly the same. It’s the price of NEMO Green SDRs that determines the exchange rate between national currencies and the NEMO Exchange Standard.

This exchange system is inspired by the 1820 exchange regime under the Gold standard, but with the NEMO benchmark replacing gold. Utilizing a simple rule of three, this system calculates the price that the importer will pay and the income that the exporter will receive. Through this method, the importer’s currency payment will be destroyed, and the exporter’s currency payment will be created. NEMO SWIFT is tasked with organizing these inter-currency conversions within the framework of international trade.

Example 1: Traditional trade transaction between France and Japan

Let's imagine a simplified example to illustrate how the NEMO Exchange Standard works in an international trade scenario.

- Exporting country: France
- Importing country: Japan
- Product: French wine
- Sale price: €10,000

Fixed, revisable exchange rates (fictitious for the example):

1 € = 2.85 NES (NEMO Exchange Standard)

1 ¥ (Japanese Yen) = 0.2 NES (NEMO Exchange Standard)

The exchange rate (at certain) for 1 € in ¥ is 2.85/ 0.2 = 14.25

So €1 = ¥14.25

Transaction steps

1. Conversion of the Sale Price: Price in € (euros): €10,000 Conversion into NES according to the exchange rate: €10,000 * 14.25 = ¥142,500

2. Payment procedure via NEMO Swift: The Japanese company pays ¥142,500 for the import of French wine. NEMO Swift receives the payment in ¥, converts the sum into €10,000. The Japanese importer's initial ¥ payment is destroyed in the process, while the € payment for the French exporter is created via NEMO Swift, based on the established conversion rate.

Example 2: Environmental service between Senegal and the GAIA Economic Symposium

Here is a simplified example to illustrate how the NEMO Green DTS works in a common good delivery scenario, in this example, an Atlantic de-pollution activity.

- Service provider country: Senegal
- Importing country: GAIA Economic Symposium
- Service: De-pollution of 2000 tonnes of plastic waste in the Atlantic Ocean
- Sale price: 12 NEMO Green DTS per tonne of plastic waste

Fixed exchange rate between NEMO Green DTS and NEMO Exchange Standard

The exchange rate for 1 NEMO Green SDR to NEMO Exchange Standard is 1:1 therefore:

1 NEMO Green SDR = 1 NEMO Exchange Standard

Fixed, revisable exchange rates (fictitious for the example):

1 Eco Cédéao (new Senegalese currency) = 0.3 NES (NEMO Exchange Standard)

The payment for this service will be 2000 * 1 t * 12 NES = 24000 NES

and 24,000 * 1 / 0.3 = 80,000 Eco Cédéao

Transaction steps

1. Conversion of the Price of the service: Price: 24000 NEMO Green DTS = 24000 NES

   According to the exchange rate: 24000 * 1 / 0.3 = 80000 Eco Cédéao

2. Payment procedure via NEMO Swift: The GAIA Economic Symposium pays 24,000 NEMO Green SDRs for the Senegalese service. NEMO SWIFT receives the payment and converts this sum into 80,000 Eco Cédéao.

The initial payment in NEMO Green SDR from the GAIA Economic Symposium is destroyed in the process, while a corresponding payment in Eco Cédéao is created for the Senegalese service provider via NEMO SWIFT, based on the established conversion rate. It's important to understand that these creations and destructions of currencies are merely accounting entries, existing purely in the scriptural domain.

The groundbreaking innovation of this concept lies in the fact that the global monetary standard is not a coveted raw material but the recognition of an activity that regenerates the commons, agreed

upon by global convention. This represents a historically unprecedented approach, where the ethics and value of a currency are not backed by gold but by an unenviable task whose accomplishment is universally recognized and compensated.

> *Rather than ransacking the planet to look for gold, repair it !*
> *You'll have Nemo !*

Put simply, rather than plundering the planet for gold, its restoration will be rewarded with NEMO Green SDRs, marking a significant paradigm shift in how we value environmental preservation and restoration efforts.

National Monetary and Macro-prudential Policy within NEMO IMS

NEMO IMS presents a supranational solution that achieves national macro-prudential balances without relying on exchange rate fluctuations in global trade of goods and services. This approach reduces pressure on natural resources by circumventing the constraints of the Mundell-Fleming model (Mundell triangle). With fixed exchange rates, currency values do not fluctuate relative to one another, and their stability is no longer tied directly to foreign trade. Moreover, the foreign trade balance is stabilized through ecological services sold to the "nation" of the GAIA Economic Symposium.

A significant portion of private and sovereign debts are offset by these regeneration activities. International capital mobility is also freed from the speculation typically associated with floating exchange rates, resulting in more robust and predictable financial information.

These reductions in sovereign debt enable states to implement more favorable budgetary policies toward essential public services such as education, health, culture, the welfare state, and other sovereign systems. For price stability, central banks can employ both traditional and innovative tools to regulate the credit issuance capacities of commercial banks, thereby curbing monetary inflation alongside growth. These balances can be managed through the adjustment of NEMO Green SDR flows or by manipulating various financial regulatory mechanisms:

- Required reserve rates
- Key interest rates
- Socio-ecologically weighted commercial bank rates
- Equity levels
- Monetary meltdown (font or destruction) on transactions, socio-ecologically weighted

Monetary Meltdown on Transactions

In this discussion, we focus solely on transaction melting mechanisms, given that other mechanisms are already familiar. We have observed that debt-free money facilitates the settlement of some financial debts through the law of monetary reflux. However, it is crucial to remember that money remains in demand deposit accounts, savings accounts, under mattresses, or in tax havens. This is money that was initially created by banks during credit operations. A sudden re-entry of these positive balances into the economy could lead to a destabilization of prices due to a positive demand

shock. Even without such re-entry, if money continues to be created, a portion of the money supply —those funds not affected by banking reflux—must be eliminated to avoid quantitative unbalance.

NEMO IMS theorizes a permanent monetary flow between the creation and destruction of money. The strategy is to "melt" this currency at the most damaging points in the economy during financial and commercial transactions. A progressive percentage deducted from VAT will be designated for monetary destruction.

Note : Alternatively, we could envisage a monetary reflux towards the GAIA Economic Symposium, where NEMO Green SDRs would issued simultaneously with debt for activities related to the commons.

These funds earmarked for destruction will be adjusted based on ecological and social weightings, adhering to the polluter-pays principle. The goal is to withdraw money (and therefore income) from the most harmful sectors of the economy to incentivize economic agents to transform their production models. This approach not only helps regulate the quantity of money in circulation but also promotes the sustainability of production systems and environment.

Exogenous Inflation and NEMO IMS

NEMO IMS acknowledges that inflation is not solely a monetary phenomenon. It can also arise from exogenous sources such as raw material shortages, poor harvests, wars, and climatic disasters. One of the core missions of the GAIA Economic Symposium is to anticipate and mitigate these shortages more effectively than traditional market mechanisms can.

This proactive approach may include strategies such as substituting certain crops with others that are more resilient or better suited to changing climatic conditions. Additionally, initiatives like replanting and preserving forests will help maintain the planet’s "lungs," while depolluting the oceans will safeguard vital oceanic ecosystem services. The preservation of these critical natural resources is essential to ensuring the long-term viability of life on Earth, thereby preventing shortages and contributing to long-term price stability.

If the commons—the fundamental basis of all we value—were to collapse, so too would the entire economy. Without this foundational support, no economy could function, and nothing would retain any meaning. This scenario underlines the importance of maintaining and regenerating the commons to avert the economic and existential risks posed by exogenous inflation.

Transition, Degrowth, Selective Growth ?

After delving into the research of scholars like Jean Baptiste Fressoz, I have decided to discard the notion of energy transition from my discourse ; it is a concept that has never existed and never will. Historical economic analysis shows that new primary energy resources have never replaced older ones. Instead, market and financial forces have merely accumulated different primary energy resources without ever aiming to substitute the more harmful ones. This growth-driven logic results in a stacking of all available energies, not a replacement of them.

As long as these primary energy sources are available and economically viable in terms of Energy Return on Investment (EROI), they will be exploited by human ambition and financial appetites. The financialization of the economy predicates the overexploitation of surplus, a trend that will intensify as human and financier populations grow, continuously expanding their demands. This leads me to conclude that an ecological transition is unlikely and that the only viable path to preserving life on Earth is through degrowth or selective growth.

Degrowth will occur ! Whether strategically chosen or tragically endured !

NEMO IMS offers a unique financial roadmap that facilitates the choice of this degrowth. Perhaps it would be more palatable to reframe "degrowth" as "chosen growth"? This isn't just a matter of semantics or acceptability ; while certain developing countries may need to grow until they reach an acceptable standard of living, affluent nations must halt their pursuit of the ostentatious "American way of life"—a race characterized by conspicuous consumption.

It's important to recognize that neither people nor the planet inherently require growth; it is finance that demands it. There was a time when finance served the economy, but today, the economy serves finance. In this scenario, humanity and nature have become mere variables for adjustment. Finance has usurped a position it cannot and should not hold. What was once a simple tool has become the queen of the system, transforming our economy into a perpetual Sisyphean calamity where financiers continuously seek greater profits, oblivious to the environmental destruction that ensues.

Finance, having evolved from a humble servant to a tyrannical queen, now dictates terms in a way that is unsustainable for both our planet and our society.

What is selective growth ?

GDP is widely recognized as an incomplete indicator of economic health. Economists often celebrate its growth without critically assessing the nature or impact of the activities contributing to these figures. This raises a crucial question : Do the outputs of our economy create more societal problems—such as negative externalities—than they solve ? Are we manufacturing false needs to stimulate consumer desire, and creating unnecessary fears to drive economic activity ? Creating problems to sell solutions perpetuates the traditional capitalist model focused on work, finance, and growth.

It's evident that certain market sectors, which contribute to this unsustainable cycle, need to either shrink or cease entirely. Meanwhile, sectors vital for sustainability remain unviable in the short term due to financial neglect, illustrating the profound paradox between utility and profitability in our market economy.

Not everything that is essential is necessarily profitable, not everything that is profitable is necessarily essential !

NEMO IMS seeks to resolve this paradox by redefining profitability. It envisions a model where financial viability is created ex nihilo for sectors that are crucial yet currently insolvent, such as the regeneration of commons and the preservation of ecosystem services. The principle of selective growth under NEMO IMS advocates for an increase in regenerative activities and a decrease in ex-

tractive ones, striving for a balance where the growth of the extractive economy is no longer a prerequisite for funding public services and addressing environmental challenges.

This shift promises a transformation where the economy not only sustains but enhances our ecological and social structures, moving away from the extractive imperatives that have historically driven economic policy.

NEMO IMS and Kate Raworth's doughnut theory

NEMO IMS is a financial system that fits perfectly with Kate Raworth's doughnut theory. The idea is to maintain a balance between the criteria of human society with the capabilities and carrying capacities of the planet. This theory visualizes a sustainable and inclusive economy by defining a safe and just space between the "social foundation," which addresses basic human needs, and the "ecological ceiling," which prevents environmental degradation.

NEMO IMS aims to operationalize this balance by promoting financial structures and mechanisms that support this dual objective. It provides a framework that not only encourages regeneration of ecosystem services but also ensures that economic activities do not extend beyond the ecological limits of the planet. Simultaneously, it seeks to uplift societies by securing essential human rights and needs as a priority within its economic model.

By aligning with the doughnut theory, NEMO IMS introduces a new paradigm where the economy serves both people and the planet, avoiding the traditional trade-offs between environmental health and economic development. It fosters a selective growth model, focusing on areas that can sustainably support both ecological integrity and human welfare, thereby ensuring that no one falls short of life's essentials while we stay within the Earth's ecological boundaries.

This integration of NEMO IMS with the doughnut theory represents a significant shift towards a more equitable and sustainable global economy, challenging the status quo and redefining what is considered valuable and necessary for a thriving future.

Conclusion : Change or Disappear ?

This question has never been more pertinent. We have observed that a sober economy cannot coexist with the prevailing model of aggressive finance. The transformation of our economy, a prerequisite for preserving life, necessitates a complete overhaul of our monetary, banking, and financial systems.

> *In the same way that it is illusory to repair porcelain with a hammer, we will not slow down predatory productivism with a financial system that is designed to accelerate it !*

The productivist, neoliberal model is entrenched in the ideology of a self-sustaining, growth-oriented market. We often find ourselves countering not only climate skeptics but also apostles of techno-solutionism who believe that geoengineering or other transhumanist ventures can facilitate our transition. These advocates only waste time and engage in fruitless pursuits (one step forward, two steps back), or worse, bury their heads in the sand.

Year after year, from one COP to the next, the essential economic transformation necessary to secure the conditions of life on Earth is continually deferred and disregarded.

With finance steering the economy, there is a relentless drive toward maximizing short-term profits, oblivious to the systemic blind spots of its own making. Entrenched in outdated paradigms, financial leaders cling to the notion of "green BAU finance" without recognizing the impossibility of decoupling growth from environmental impact or the tragedy of horizons.

We know that the most profitable sectors are often the most harmful and extractive. Thus, our economic practices will not be transformed by spontaneous market mechanisms, but through the implementation of effective incentives, stringent regulations, and restrictive penalties—only these can genuinely effect change.

If finance’s short-term focus continues to dictate our economic priorities, we must initiate a radical transformation of this finance. The discourse on economics must extend beyond the confines of economists; the stakes are too high and demand a holistic synthesis. There is a glaring need for interdisciplinary collaboration across the human sciences. Economists, often confined within narrow academic silos, need to engage with other disciplines to unlock new perspectives and solutions. By integrating traditionally isolated fields, we can foster systemic thinking and understand that these expertises intersect across various junctures.

Societal issues affect every citizen, and it is imperative that we develop mechanisms to inform, consult, and involve the public in decision-making processes. We are tasked with reinventing our world because changing the monetary system is tantamount to changing the world itself.

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Table des matières

NEMO IMS....1
Introduction....1
Integration of Thermodynamics into the Monetary Concept....2
The Sisyphean Myth of Debt (The Compound Interest Trap)....2
Bank Money: A Matter of Accounting....3
Debt as a Promise of Future Extraction....3
The Paradigmatic Curse Between Financial Debts and Planetary Debts....4
Debt-Free Money: A Weapon for Massive Debt Reduction....4
The GAIA Economic Symposium....5
The NEMO Green DTS....6
The International Monetary System with NEMO IMS....7
Organizing Exchanges with the NEMO Exchange Standard....9
Example 1: Traditional trade transaction between France and Japan....9
Example 2: Environmental service between Senegal and the GAIA Economic Symposium....10
National Monetary and Macro-prudential Policy within NEMO IMS....11
Monetary Meltdown on Transactions....11
Exogenous Inflation and NEMO IMS....12
Transition, Decline, Selective Growth ?....12
What is selective growth?....13
NEMO IMS and Kate Raworth's doughnut theory....14
Conclusion: Change or Disappear ?....14
Bibliography....16

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