
John Moser

3102 Oakford Ave
Baltimore, MD 21215
(443) 588-5043

Modernizing Tax and Income

A Strategy for Income Equity

10th April 2018

OVERVIEW

Nations have used a broad variety of tax and income policies to set tax rates, minimum wages, and welfare benefits levels. The current strategy, which we might call classical or cost-of-living tax and income strategy, uses cost-of-living adjustments (COLA) indexed to various measures of inflation to adjust tax brackets, minimum wages, and means tests and benefits for income security programs.

Cost-of-living strategy operates on the ideal of setting a minimum standard-of-living: a person may be so poor, and only so poor, and so is entitled to a living wage, subsistence support, and other minimum services. Under cost-of-living policies, the poorest remain as poor as ever, even as the Nation as a whole becomes wealthier.

In this paper, I propose a new type of tax and income strategy based around the ideal of a fair share of our economic wealth. Rather than inflation indexes, these policies directly or indirectly follow the Gross National Income Per Capita—a measure of all income in a Nation divided equally among all population. We might call such policies Fair Income rather than cost-of-living policies.

Fair Income policies attempt to ensure that tax and income policies reflect the National wealth as the amount of income earned per individual in local currency units (LCU). These policies may follow the trend, rather than an exact metric, such as by using all taxable income and corporate profits to set a particular benefit, or by setting a minimum wage or tax liability based on the GNI divided by all working-age adults to approximate all potential income earners rather than all population.

These proposals, in the United States, come together as a competitor to and a repeal-and-replace strategy for the Tax Cuts and Jobs Act of 2017. Many use a Per-Adult formula rather than Per-Capita; the use of GNI-per-Equivalent-Adult via an [OECD Equivalence Scale](#)^[1] for some policies—notably income tax rates—may provide advantages.

GOALS

1. Provide a Fair Income Tax Policy whereby a filer's Effective Tax Rate (ETR) depends on their share of productivity.
2. Provide a Fair Corporate Income Tax Policy which allows for a fair profit and taxes excessive profits more-heavily.
3. Provide a Fair Minimum Wage Policy by which the minimum wage grows with productivity.
4. Provide a Fair Share Social Security Policy to provide a fair share to every adult, elevating the poorest enough to ensure their access to food, shelter, and available jobs.
5. Ensure the poor and middle-class benefit proportionally from any and all productivity gains.
6. Minimize any tax increases, relative to pre-Tax-Cuts-and-Jobs-Act tax policy, leaving room for further efforts such as universal healthcare.
7. Avoid any new deficit spending, relative to pre-Tax-Cuts-and-Jobs-Act tax policy.

INCOME INEQUALITY

A great many sources on the Internet confuse the term “wealth inequality” as a comparison of either income or assets. One of the more-popular videos on the subject several years back regularly switched from discussing how much high-income earners had and how much CEOs earned in comparison to low-income earners. With such confusion, we must first address why the topic of this paper is income equality.

Consider two persons living in the same area: Alice and Bob. Alice and Bob both have \$58,000 of income each year—roughly the GNI-per-Capita of the United States in 2016. Bob, however, has \$1,000,000 in the bank.

One might imagine that Alice has a middle-class lifestyle while Bob lives lavishly as a millionaire. That might be true; yet every dollar Bob spends which Alice does not diminishes the gap of wealth between he and Alice. If Alice lives paycheck-to-paycheck while Bob lives comfortably, Bob will eventually be broke—like Alice—and struggling to get by. If, on the other hand, Alice saves money out of each paycheck, then maybe Bob is just older than her—putting \$18,000 in your 401(k) for 55 years will do that, assuming these people can get by on \$40,000.

Wealth inequality skews as income inequality increases. If Bob lives at the same standard as Alice yet has \$50,000 more income, then Bob will have \$500,000 in the bank in ten years, while Alice has nothing because she lives paycheck-to-paycheck.

In today's age of large mergers and acquisitions, CEOs and other executives often earn between \$20 and \$200 for each employee per year, racking up millions in salaries and bonuses. A CEO with a \$4,000,000 salary has only fifty times the income of an \$80,000/year IT Engineer, yet in ten years of service will amass five *hundred* times the employee's salary while the employee might have one year's salary in savings.

Income inequality *creates* wealth inequality; and, more than that, income holds up a lifestyle for the long term. High-wealth individuals can use investments and other vehicles to minimize taxes and transfer wealth from others to themselves, creating more income inequality.

The per-employee executive earnings example only suggests our greatest benefits come from shielding the lower-income earners from such inequality. This leads us to income *equity*: ensuring that taxes, wages, and social safety nets are adequate to protect the lower- and middle-income earners from the consequences of income inequality.

Income equity is itself a subset of *economic* equity, which includes access to healthcare, education, and employment. Economic equity ensures the lower- and middle-income earners are protected from economic hardships and have access to the means of economic mobility, allowing them to pursue opportunities which would otherwise only be available to the more-wealthy.

POLICIES

I describe herein four types of policies:

1. A Fair Income Tax Policy by which the effective tax rate is progressive and tied to a percentage of the GNI-per-Adult.
2. A Fair Corporate Income Tax Policy by which the Effective Tax Rate is progressive and tied to the Net Operating Profits.
3. A Fair Minimum Wage Policy by which the GNI-per-Adult determines the minimum wage.
4. A Fair Share Social Security Policy by which every adult receives a fair share of the GNI-per-Adult.

TaxGNI: The Fair Income Tax

The United States currently assesses individual income tax via a system of exemptions and deductions to find taxable income or Adjusted Gross Income (AGI), income brackets to identify the tax liability, and credits to offset tax liability. Exemptions, standard deductions, and some tax credits adjust based on inflation measures each year.

The Tax Cuts and Jobs Act of 2017 further reduced fairness in the tax system by eliminating personal exemptions and tying tax bracket adjustments to Chained-CPI-U, a measure of inflation

slower than traditional rates and based around the idea that consumers will move spending to lower-cost substitutes when goods become more-expensive. In other words: the new tax law raises the tax rate each year even on Americans who are actively falling to a lower standard of living.

The proposed TaxGNI system uses a measure of the Gross National Income Per Capita to compute taxes. It trades personal exemptions, filing statuses, and tax brackets for algebra requiring a pocket calculator.

Base Model

In its simplest form, the TaxGNI system compute the Effective Tax Rate (ETR) via a formula such as the below:

$$\left(1 - \frac{1}{\frac{a \cdot \text{Income}}{G} + b}\right) \cdot R$$

The IRS supplies the values of (a), (b), (G), and (R) for the taxpayer.

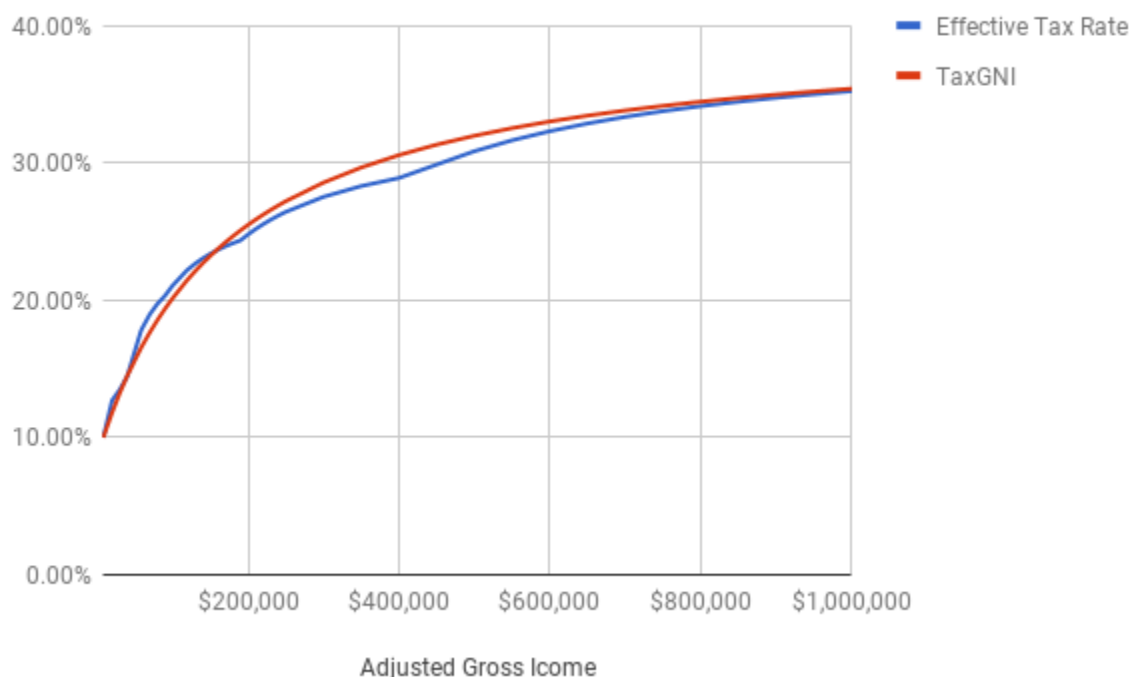
The values (a) and (b) control the shape of the progressive curve and remain published and unchanged year to year. Altering these affects the distribution of taxes, raising or lowering taxes on the poor, middle-class, or rich separately.

The GNI-per-Capita (G) is the published value in Local Currency Units. This is a standard, international measurement, and retains transparency. For an unchanging Income/G, the tax rate stays the same year after year: if you don't receive a fair share of the productivity, your tax rate goes down.

The top tax rate (R) controls actual tax rates. Adjusting this has a proportional impact on everyone: if increased by 1/4, the wealthy may move from 40% to 50%, while the poor move from 10% to 12.5%. In essence, the shape of the curve defines what we believe is fair and progressive, while the rate defines how much tax we are willing to pay as a society.

The below graph shows our 2016 effective tax rates (not including Social Security FICA taxes) in red and the TaxGNI curve in blue. This example uses 0.43 and 1.27 for (a) and (b), a GNI-per-Capita of \$58,030, and a top tax rate of 40%. [Recommending value of 1.20 and no standard deductions]

Effective Tax Rate and TaxGNI



As shown, taxes are a little lower for lower- and middle-income taxpayers, while some higher-income taxpayers face up to a 1.67% increase at \$400,000—around \$6,600.

Eliminating Personal Exemptions and Filing Statuses

Personal Exemptions and Filing Statuses add complexity to tax filing by requiring an enormous number of modifications and comparisons across several outcomes. In practice, filers without professional tax accountants simply file based on their obvious status and count up their exemptions, instead of minimizing their liability.

Instead, we can use a single “Household” filing status incorporating any number of filers and dependents living in the same household. Any advantages to filing separately are easily-identified and acted upon.

Rather than modifying income by deducting personal exemptions, the TaxGNI system adjusts the GNI-per-Capita by the number of Equivalent Adults. Economists commonly use either the OECD Equivalence Scale or the OECD-Modified Scale. These scales attempt to modify the income of a multi-occupant household to reflect the standard-of-living of a single-occupant household.

The TaxGNI system uses the OECD Equivalence Scale, although we may require further modification. Scales which weight household members more-heavily tend to assume children of lower-income families are in poverty, hence the use of the older model.

	Head of Household	Age 14 and over	Children under 14
OECD Equivalence	1	0.7	0.5
OECD-Modified	1	0.5	0.3

Economists equivalise household income by adding up an equivalence value per one of these such scales and dividing the household income by that value. For example: a household with two adults and three children under age fourteen, using the OECD Equivalence Scale, would have its household income divided by 3.2. We can achieve the same by multiplying the GNI-per-Capita by the household Equivalence Value (E):

$$T = \left(1 - \frac{1}{\frac{a \cdot \text{Income}}{G \cdot E} + b}\right) \cdot R$$

This produces a tax rate slightly less-generous for a two-adult household than the current Married-filing-Jointly tax brackets; add a child and the tax rate is advantageous.

The bigger problem comes from the higher brackets: the top tax rate falls dramatically. To handle this, we obtain the Equivalence Value (E) from the base OECD Equivalence Value (E') using a sigmoid:

$$E = 1 + \frac{E' - 1}{1 + e^{2\left(\frac{\text{Income}}{G} - 3\right)}}$$

The numbers (2) and (3) above essentially set the bulk of the downscaling to occur over a span of twice the GNI-per-Capita (G) centered at three times the GNI-per-Capita.

Deductions

The TaxGNI system deducts from accountable income entirely, eliminating it from taxation and tax rate. One could argue that non-deferred deductions should be excluded from computing the tax rate and taxed at the final rate, but the rules for doing that are more-complex.

There is some merit to eliminating the mortgage interest deduction. If you owed \$250,000 on your mortgage at 5%, you'd pay \$1,200 each month plus property taxes and insurance, with \$9,900 over the year. At a 25% marginal rate, that's almost \$2,500 of deductions; however, with the new tax law's \$24,000 standard deduction, most middle-income families see no benefit from itemizing, and [most mortgage interest deductions go to the wealthy](#)[6].

On the other hand, were we to reduce the standard deduction—say to 10% of GNI-per-Capita multiplied by the Equivalence Value—the mortgage interest deduction may have significant impact on working families. It would still be a larger subsidy for the nation's wealthy, and so we should look for a better method of supporting homeownership and migrate away from mortgage interest deduction.

As for medical expenses, along with a national plan for universal healthcare, Health Savings Accounts should be universal. All money put into an HSA functions as both a tax-deferred IRA and a tax-exempt health expense account; combining the two such that an account is always an IRA and an HSA—an Individual Health and Retirement Account (IHRA)—would give a simple and automatic mechanism for deducting medical expenses above-line.

We should abolish student loan deductions by eliminating the student loan debt crisis through a great number of education reforms, as well as Coverdell Education Savings Accounts and 529 Plans which are non-deductible, filled with penalties, and designed to encourage individuals to take private-market risks with their education savings. None of these mechanisms truly addresses the barriers to accessibility of higher education, and we must take that responsibility upon ourselves instead of making token gestures.

In total, a tax filer needs to:

1. Compute (E') by counting the OECD Equivalence above;
2. Compute the Standard Deduction by dividing the GNI-per-Capita by 10 and multiplying the result by (E');
3. Apply any standard or line-item deductions to obtain the final AGI;
4. Compute (E) with the above formula;
5. Compute the Effective Tax Rate (T) by the formula above;
6. Multiply (T) times the AGI;
7. Apply any tax credits.

There are further questions to ask with the TaxGNI system.

Complex Households

This system better accounts for some complex modern households such as multi-generational households, but not for those such as separate parents who share child custody. We must ask a

great many questions about those households considered in the Urban Institute's [Critical Value Podcast, issue #7](#).

For such complex households, we can allow those living in the same household to group themselves into a single return. Each individual included would file their individual incomes—their forms W2, 1099, and so forth—with this return, and any included dependents would count toward the Equivalence Value. The total income would be used to compute the Equivalence Value and Tax Rate.

For such combined households, the first additional income-earning adult accounting for more than $\frac{1}{8}$ of the household income would count as 1 instead of 0.7 in the Equivalence Value computation. Without this adjustment, such households benefit by filing separate returns, complicating the tax filing process.

With this method, complex households with multiple incomes can combine their incomes and their dependents, building up a higher Standard Deduction and Equivalence Value until their incomes take them firmly into the territory of the moderately-wealthy. Struggling households could take similar advantage to a greater degree.

Consider first the example of two middle-income adults with one young child. With the GNI-per-Capita at \$58,030 and a per-individual IHRA of \$3,500 to cover medical expenses, this household has a standard deduction of \$14,508, can additionally deduct \$10,500 in IHRA contributions toward retirement or medical expenses, and so will begin phasing out their Equivalence Value around \$141,000 of combined income—at which point they are still paying the tax rate of a single filer with \$46,500 of income.

In a second example, a household with four minimum-wage incomes—two adults, two working teens—making \$81,600 with no IHRA deductions would have a \$19,720 standard deduction and a tax rate equivalent to a household making \$18,200.

In this way, households with a high amount of income do not obtain a great benefit by splitting their returns, except when a dependent member has a substantially-low income. Struggling homes and families, on the other hand, gain the ability to file together as one unit, whether they be multi-generational families or roommates working together.

State and Local Taxes

At this junction, the Equivalence Scale only seems capable of replacing Personal Exemptions. The TaxGNI system offers no compensating mechanism to replace SALT deductions. Mortgage and SALT deductions have the greatest benefit to those with the greatest income, and shield the highest-tax-rate income from the income tax. A combination of lower tax rates at the bottom and a Universal Dividend might better aid lower- and middle-income Americans to achieve

homeownership; however, the impact of these deductions increases rapidly for the middle-class, and the Federal government is typically shielded from the revenue lost by the standard deduction under the current model, whereas a lower general tax rate might be infeasible.

While we might conceivably be able to create a more-equitable approach for those deductions, taxpayers will still need to file tax-deferred savings such as IRA and 401(k), so the exercise is likely pointless unless the new strategy shifts the benefit from higher-income-earners to lower: we can't eliminate all deductions from the tax filing process, and so won't be able to reduce complexity in that manner.

The Fair Corporate Income Tax

Franklin D. Roosevelt spoke frequently of the right to an expectation of fair and reasonable profit in American Enterprise, such as in his [April 14, 1938 Fireside Chat](#)^[3]:

You and I agree that security is our greatest need; the chance to work, the opportunity of making a reasonable profit in our business—whether it be a very small business or a larger one—the possibility of selling our farm products for enough money for our families to live on decently. I know these are the things that decide the well-being of all our people.

In my [Second Bill of Rights](#)^[5], I expand upon this and other ideals [once put forth about business](#)^[4]:

The right of every consumer, worker, shareholder, and other stakeholder of businesses large and small to a fair and reasonable profit through trade in an atmosphere of freedom from unfair competition and domination by monopolies at home or abroad, and to the freedom from unfair labor practices and the right to organize and negotiate on fair grounds for fair terms of employment.

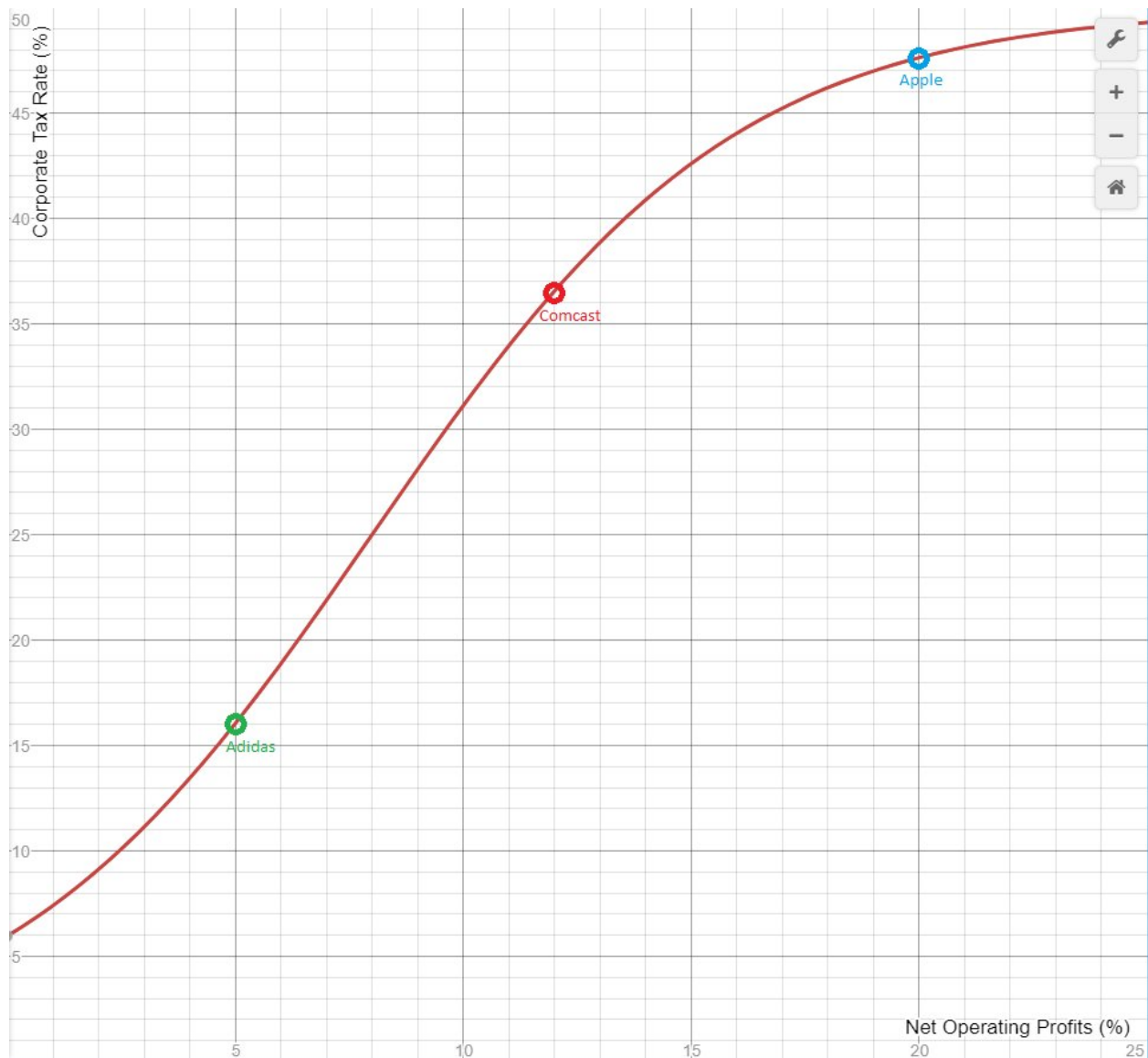
A great many American businesses draw a net operating profit of approximately 8% as a multi-year running average. These are generally those in highly-competitive, commoditized markets, such as shoes and fast food. No matter the size of the corporation, the net operating profit margin reflects a sort of risk control: it is inappropriate to tax corporations based on simple dollar profits.

A progressive corporate income tax would apply a modest tax rate at the fair profit margin—given as 8% here—with more or less at higher or lower profits. Many businesses draw 10% or 12% profits, and some stretch as high as 20%.

For a top tax rate (R) and a margin (m), we can use the below function to calculate the effective tax rate:

$$T(m) = \left(1 - \frac{1}{1+e^{2(\frac{m}{8}-1)}}\right) \cdot R$$

For a marginal net operating profit (m) of 8%, this produces one-half of rate (R). With (R) of 35%, such a corporation would pay only 17.5% in taxes; whereas with a rate of just 12%, such as Comcast or GM, the rate is already 25.5%.



To bring the system more in-line with 2016 rates, we would use a rate (R) more in line with 50%. That places a fair-profit corporation at 25%, and a higher-profit one at 36%; whereas bigger profits start to stretch toward 50%.

Naturally-risk-prone businesses already get to carry net operating loss back 2 years and forward 20, subject to the alternative minimum tax, and so would ultimately pay a rate approaching their long-running average profit. Thus big pharmaceutical corporations or medical device manufacturers, which may bring in 48% profits and 20% losses depending on year, would pay closer to their twenty-year average in the long run—which, for some of these businesses, really is 15% or more, and for others is merely a touch high at 12%. Some luxury suppliers reach above 25% profit margins, and would pay nearly the top rate (R).

A fair corporate income tax, such as the Corporate TaxGNI model proposed here, discounts the tax rate for low-profit businesses while raising it for corporations with excessive profits. Our existing net-operating-loss carry rules prevent this policy from unfairly taxing businesses with variable year-to-year profits, as those businesses will receive a tax reduction or refund based on that loss carrying throughout the years.

Earned Wage: A Fair Minimum Wage

The modern Fight for \$15 movement aims for a \$15/hr minimum wage by 2025, with cost-of-living adjustments after that. By contrast, a Fair Minimum Wage would grow faster than cost-of-living, although it may not hit \$15/hr until some time after 2030. With the Universal Dividend, further down, the total take-home for a single-adult household with a full-time job should slightly exceed a \$15/hr wage by 2020, with the employer-paid wage at about \$10.50/hr.

Under a Fair Minimum Wage policy, the Federal Minimum Wage shall not reflect less than one-fourth the GNI (LCU) divided by the Adult population. In 2016, the [GNI of \\$18,969 billion](#) would divide out to a [GNI-per-Capita \(LCU\) of \\$58.703](#)[2], or roughly \$76,000 based on the US Census QuickFacts estimates of total and under-age-18 population.

Given a 40-hour work week and two weeks of vacation, the minimum wage reflects 2,000 hours of work at \$9.50/hr or around \$19,000/year in 2016. With a shorter definition of full-time work, the minimum wage would increase.

The American Citizen's Dividend: A Powerful Economic Guarantee

Accumulation of the factors of production—labor, factories, and so forth—only provide a limited portion of economic growth; and such growth only represents a larger GDP for the Nation, rather than a larger amount of wealth per capita.

Increases in standards of living only come by way of technical progress, trade, and migrant labor. These structural changes displace a small number of jobs at a time, with broad wealth-creating effects: some employers issue layoffs and some workplaces close down, while nearly everyone in the Nation enjoys lower prices and greater purchasing power.

While this process creates winners and losers, the proportion of winners is so broad and so far ahead that they can, in principle, compensate the losers. We call this compensation “social risk sharing”, and know it best in the form of social insurances and welfare programs such as the Social Security Administration’s retirement and disability benefits, Medicare, Medicaid, and unemployment insurance.

The United States lacks—and would benefit greatly from—a powerful, foundational collective risk sharing program. Such a program will create a basis on top of which to build other programs, and will strengthen the economy such that those other programs are less-necessary and thus less-expensive. Decade-long waiting lists for housing assistance and food insecurity for those receiving SNAP benefits suddenly evaporate when people are less-poor, jobs are more-plentiful, and fewer are relying on these systems.

A Universal Dividend

The Social Security Administration should provide to every American a universal dividend from the American economy—a modest and fair share of all productivity. This American Citizen’s Dividend would promise nothing; rather, it would take a portion of all personal and corporate income as a FICA tax, and redistribute this evenly among all Adult Citizens. From a basis of 2016 tax law, we can implement a substantial Dividend without raising tax burdens or creating deficits.

Such a Dividend paying twice-monthly provides proportionally-greater cash income to lower-income households than wealthier households. By extension, areas of concentrated poverty experience what amounts to a powerful economic stimulus, creating jobs and rebuilding economies where structural change has collapsed local industry: poverty-stricken regions quickly grow back to middle-class.

Both of these effects also reduce the amount of welfare demand in the region, allowing stronger and more-targeted welfare services. Programs such as HUD and SNAP can keep people in their homes, properly fed, and financially stable, all without increasing budgets. Social Security’s retirement and disability benefits are made permanently-solvent by building on top of the Dividend; and the Earned Income Tax Credit—a once-yearly payment—is replaced by the Dividend’s larger benefit broken into twice-monthly payments.

Providing the Dividend

The [fiscal model for this program](#)[3] demonstrates viability rather than speculating on final outcomes. In a nutshell, the process on-paper involved:

- Rolling Social Security FICA taxes—including payroll taxes—into income tax brackets;
- Counting Social Security disbursements, the Earned Income Tax Credit, and ¼ of a few welfare services as restructurable;

- Removing the proportion of income taxes represented by these from both personal and corporate income tax rates;
- Applying a 12.5% ($\frac{1}{8}$) FICA to both personal and corporate income to fund the Dividend;
- Rebuilding Social Security Retirement and Disability benefits on top of the Dividend.

This process replaces the Earned Income Tax Credit with a Dividend which, in 2016, would have paid \$6,700 of non-taxable income to every American adult. I've excluded the non-taxed portion of the Corporate Income Tax from the calculation, as well as all personal savings—some of which represents tax-deferred savings.

The reduction in cost of certain welfare services is ambitious; and it only includes housing assistance, SNAP, and TANF, while ignoring a great many other welfares which would also face reduced load. This part of the restructuring represents only about \$500 per adult in 2016, so reclaiming this via general tax increases still comes out net-ahead.

The tax rates, without further adjustment and including the new Dividend FICA, include a 33.5% Corporate Income Tax and a 3.4% tax cut at the top bracket. This leaves plenty of room for tax rate adjustments, notably at the top bracket (or via a TaxGNI system).

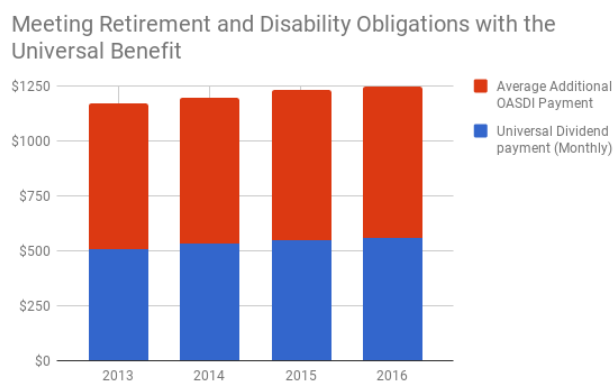
Impact on Social Security

The Dividend's funding is partly a matter of uneven advantage: tax rates in total are actually somewhat higher, while the tax rate when accounting for the Dividend as a rolling tax refund is lower. A single individual earning minimum-wage might take home \$6,000 additional spendable income, while one with a \$50,000 salary would take home only an additional \$3,000.

The remainder comes from the Dividend taking over some of the funding of Retirement and Disability benefits.

Using the Dividend as a foundation, Retirement and Disability benefits pay enough that the recipient receives the same total when including the Dividend as under the existing program rules.

This restructuring moves part of the burden of OASDI onto the Dividend. The Dividend grows with productivity, and so further unburdens Social Security's OASDI Trust over time. This guarantees permanent solvency of all three programs while eliminating any fiscal rationale for future benefits cuts.



REFERENCES

- [1] <http://www.oecd.org/eco/growth/OECD-Note-EquivalenceScales.pdf>
- [2] <https://data.worldbank.org/indicator/NY.GNP.PCAP.CN?locations=US>
- [3] <http://www.presidency.ucsb.edu/ws/index.php?pid=15628>
- [4] <http://www.presidency.ucsb.edu/ws/index.php?pid=16518>
- [5] <https://docs.google.com/document/d/1cCwW23mSatl89OLTPttUetGP2NLkLG7XR1SciOINf4/edit?usp=sharing>
- [6] <https://www.taxpolicycenter.org/taxvox/how-recent-tax-reform-sounds-clarion-call-real-reform-homeownership-policy>