NATIONAL INDICATORS FOR A NEW ERA

EXECUTIVE SUMMARY

The U.S. Department of Commerce has described Gross Domestic Product (GDP) as "the crowning achievement" of 20th Century U.S. economic policy. This is not an exaggeration. In the eight decades since the introduction of U.S. national income accounts, GDP has become the official barometer of business cycles, an indispensable measure of government performance, and a leading benchmark for assessing living standards. It has, in other words, become a de facto headline indicator of economic, political, and social progress.

GDP was never intended for such a role. Economists have long warned that GDP is a specialized tool for measuring market activity rather than the nation's comprehensive prosperity. While the indicator achieves its stated objective of capturing aggregate, short-term economic activity, it is agnostic as to what might be described—by both Republicans and Democrats—as core elements of national wellbeing in the 21st Century: economic mobility, strong families and communities, entrepreneurship, health, education, environmental quality, and public safety.

GDP tends to rise with societal problems such as healthcare costs, pollution, household debt, commuting time, and family breakdown. As a short-term measure of economic output, it increases with the depreciation of machinery and the extraction of finite resources, while failing to reflect the long-term contributions of education and entrepreneurship.

In light of these shortcomings, this report seeks to answer an overarching question: ***How should the U.S. government institute supplemental national accounts that better reflect the wellbeing of the nation?*** The report's central premise is that new comprehensive indicators would lead to better-informed policymaking, and, in turn, genuine advances in the nation's prosperity. The report presupposes that GDP still serves an important, although limited, purpose and should not be replaced, but supplemented.

The task of supplementing the national accounts is complex yet achievable. This report makes recommendations on three core steps of such an effort:

1. Enact legislation to create a new **National Indicators Commission;**
2. Design new indicators; and
3. Attain the operational capacity in the executive branch to produce new indicators.

Advances in statistics, computing, and data collection have made possible the meaningful estimation of national wellbeing. When the national income accounts were first developed, measuring and incorporating factors like health outcomes and nonmarket labor was not feasible. Today, we have overcome many such limitations. The proposal for a new commission on national indicators seeks to enable the United States to harness state-of-the-art thinking regarding indicator development. By delegating methodological questions to technical experts who are trusted across the ideological spectrum, it seeks to remove politics from the business of statistics. By aiming to supplement rather than replace GDP, it seeks to promote sound incremental change. By stipulating new indicators that offer a more comprehensive, longer-term picture of national wellbeing, the proposal seeks to restore U.S. leadership in the science of measuring progress.

FINDINGS AND RECOMMENDATIONS

INITIATIVES

Central to the report's recommendations is the notion that Congress should act now to modernize the U.S. national accounts by establishing a process to resolve remaining methodological questions. Congress should pass legislation to create a bipartisan expert commission to address such issues and recommend means of bolstering operational capacity in the U.S. statistical services.

RECOMMENDATION

Congress should pass legislation to establish a National Indicators Commission charged with the technical decisions of indicator formation and the establishment of an action plan for implementing new indicators in federal statistical work.

INDICATORS

Advances in data availability and statistical methods have enabled the development of over two dozen viable alternative measures of social and economic progress over the last forty years. Unlike GDP, these new supplemental indicators take factors such as health, safety, and educational attainment into account as determinants of the nation's wellbeing. While U.S. allies and U.S. states have begun incorporating such alternatives into their accounting systems, new indicators bring genuine methodological complexities. Such complexities can be resolved through careful indicator design.

RECOMMENDATION

Congress should prescribe the broad parameters of four new, carefully-designed supplemental National Indicators: G2 Current Prosperity, G3 Durable Prosperity, G4 Current Wellbeing, G5 Durable Wellbeing. The the bipartisan National Indicators Commission should address unresolved methodological issues in computing the new measures.

INSTITUTIONS

With more than 20 statistical agencies and extensive experience aggregating indicators across departmental jurisdictions, the U.S. government is well-equipped to begin developing and integrating new comprehensive indicators. In particular, the Bureau of Economic Analysis (BEA) and Interagency Council on Statistical Policy can help orchestrate an interagency process. Challenges to be resolved include data availability, timeliness, standardization, and cross-jurisdictional cooperation between statistical agencies.

RECOMMENDATION

Congress should task the new bipartisan commission with submitting an "indicator development plan" to the president, outlining ways in which new indicators might be computed, aggregated, and reported.

INTRODUCTION

Gross Domestic Product occupies a unique unofficial position as the "headline indicator" of political and economic progress in the United States. Eight decades after the establishment of U.S. national accounts, political leaders still rely on GDP as an essential benchmark in designing and justifying fiscal, monetary, trade, and regulatory policy; businesses employ it as a key signal for determining expenditure and investment; and journalists and voters routinely look to it as a proxy for presidential success or failure.

> ***"Our gross national product... if we should judge America by that – counts air pollution and cigarette advertising, and ambulances to clear our highways of carnage... Yet the gross national product does not allow for the health of our children, the quality of their education, or the joy of their play... it measures everything, in short, except that which makes life worthwhile."***
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> ***– U.S. Senator Robert F. Kennedy, 1968***

> ***"GDP is an accounting device – and a poor measure of economic health... If the government spends more than it takes in, this adds to GDP, no matter what the spending is used for and no matter how it is financed... How can we make good policy when we don't even know what we're trying to improve?"***
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> ***–Derek Scissors, Heritage Foundation, 2013***

GDP was not designed for this all-encompassing role, and it is especially ill-suited to play such a role today. While the indicator achieves its stated objective of accurately capturing short-term aggregate economic activity, it does not reflect economic mobility, entrepreneurship, health, education, community cohesion, environmental quality, public safety, and other essential elements of 21st Century prosperity. Indeed, GDP growth tends to accelerate with rising household debt, air pollution levels, and average commuting distance, while slowing with more vacation days, forest preservation, and family-cooked dinners. Because it disregards future growth potential, GDP rises with the depreciation of machinery and the extraction of finite resources, while failing to reflect the long-term value of education and entrepreneurship.

The nation can do better in measuring prosperity. Over the past fifty years, public figures ranging from Robert F. Kennedy to Reagan adviser William Bennett have pointed to the need to move beyond GDP. Academics have developed a substantial literature on the measurement of durable social and economic wellbeing. U.S. allies from the United Kingdom to Germany and U.S. states from Utah to Maryland have experimented with new comprehensive accounting and benchmarking systems.

Today in the U.S., growing signs of trans-partisan frustration with existing economic and governance frameworks—coupled with advances in data collection and statistical analysis—have opened a unique window for innovation in national accounting. Supplementing the national accounts with state-of-the-art measures of prosperity could have profound impacts on private and public sector decision-making as well as public discourse.

Why New Measurements Matter

To diagnose GDP's inadequacy as a proxy for real wellbeing, this report identifies three large gaps: (1) conflation of narrowly-defined consumption and broader economic prosperity, (2) failure to account for changes in future growth potential, and (3) omission of key, non-economic dimensions of wellbeing.

Conflating Consumption and Prosperity: As a purely market-based measure, GDP does not fully account for current-day economic prosperity. Non-market goods and services that support economic standing, such as those provided for free by families or volunteers, are not counted. As these services are replaced by market exchanges (e.g. parents hiring daycare rather than personally caring for children), the resulting rise in GDP masks a lack of change in services consumed, not to mention potential declines in family and societal cohesion. In addition, not all expenditures should be counted equally in assessing economic prosperity. While some consumption tends to bring satisfaction, people are generally less satisfied with consumption that requires incurring inordinate debt burdens. Similarly, most economists agree that an extra dollar spent by a poor person who has not yet attained basic standards of living will generate greater satisfaction than an extra dollar spent by a wealthy person who already has their needs met. To more accurately represent economic prosperity, a supplementary indicator would thus need to discount consumption financed by high debt levels or skewed towards high income brackets.

Ignoring Future Growth Potential: As a purely short-term measure, GDP does not account for the impact of today's policies on tomorrow's economic potential. First, GDP does not account for the potential technological advancement, a key to future growth, embodied in current innovation or entrepreneurship levels. Second, GDP measures economic transactions, but disregards many economic stocks. Stocks are the reservoir of resources needed for future economic output: physical capital (e.g. machinery and housing not hampered by depreciation), human capital (e.g. educational attainment, health levels), social and organizational capital (e.g. interconnectedness of productive networks), financial capital (e.g. accumulated savings), and natural capital (e.g. subsoil minerals, water). Since an increase in current-day economic activity can come at the expense of such stocks, GDP cannot act as a harbinger for sustained economic prosperity.

Omitting Key Dimensions of Human Wellbeing: As a purely economic measure, GDP does not account for important policy-relevant factors that directly affect wellbeing. Such factors include crime, smog, commuting time, nutrition levels, and leisure time. While GDP appropriately tracks some such factors, it runs counter to others. Without proper planning, traffic congestion and commute times increase alongside cities' economic growth. Without pollution abatement, smog thickens. Ascending obesity prompts increased spending on healthcare. GDP serves as a perverse proxy for progress in all these instances.

CASE STUDY: PERSONAL DEBT

During the 1960s and 1970s, the debt held by U.S. households amounted to 60% of aggregate personal income. U.S. household debt levels began to rise in the 1980s and rose even faster in the 2000s, peaking in 2007, just before the financial crisis, at 120% of personal income. Today the total household debt-to-income ratio remains high at about 100%.

The unprecedented pre-crisis escalation in household debt tended to boost GDP, as increased bank lending enabled increased consumption in the short term. But macroeconomists tend to agree that such a sustained and exaggerated increase in personal debt contributes to economic instability, while behavioral economists have emphasized the negative psychological toll that such debt burdens take on borrowers themselves.

Many economists list the historic buildup of household debt during the 2000s as a cause of the 2007-2008 financial crisis. Much of the debt increase stemmed from a rapid growth in mortgage credit, which fueled the artificially high demand for housing that inflated the housing price bubble. The expansion of credit and debt also contributed to bursting the bubble, as mortgages were newly extended to subprime borrowers that later defaulted, sparking the dramatic drop in housing prices. University of Chicago economists have found that U.S. counties with the greatest debt-to-income ratios before the crisis were the ones that experienced the highest mortgage default rates and the sharpest fall in housing prices. The ensuing recession was also particularly severe in these areas of higher pre-crisis household debt, as the large number of people facing defaults and dramatic wealth losses curtailed their spending, spurring particularly early spikes in unemployment in high-debt counties. But in the mid-2000s, the explosion of credit that helped sow the seeds for the worst recession since the Great Depression was tallied as an economic gain, according to GDP.

In addition to contributing to economic instability, high consumer debt also comes at a cost to the wellbeing of the borrowers. Behavioral economists have found that an increasing personal debt burden has a measurable impact on psychological wellbeing. A Journal of Economic Psychology study determined that, after controlling for income, savings, and other factors, individuals with outstanding consumer debt were significantly less likely to report full psychological wellbeing than non-debtors. The study showed that offsetting the psychological cost of a 10% increase in consumer debt would require a 7% increase in personal income. That's bad news for the U.S. middle class, which saw incomes stagnate as consumer debt rose during the 2000s. The resulting psychological distress was of course not captured by GDP, which rose with increasing consumption.

While some consumer borrowing is important to finance productive investments and help people weather periods of income instability, a consistently high level of household debt can dampen individuals' wellbeing today and threaten the economy's wellbeing in the future. By treating debt-based consumption the same as income-based consumption, GDP ignores these risks of high debt, signaling economic health as debt levels provide cause for economic and social concern.

We Get What We Measure

How will new supplementary indicators impact policymaking? This report contends that better measurement would engender better-informed policymaking and advance trans-partisan national interests. First, indicators impact decision-making by influencing policy narratives—including news articles, think-tank publications, election debates, and advocacy campaigns—that define policy problems and frame success.

Second, new indicators could more directly influence policymaking via benchmarking. The federal government has historically used important metrics as official targets for policymaking tools. For example, the Federal Reserve implicitly aims for a 2% inflation rate in setting monetary policy, and many Members of Congress in 2013 sought to formalize deficit reduction targets.

Such benchmarking may be on the rise. The Government Performance and Results Modernization Act of 2010 requires that the Office of Management and Budget (OMB) establish "long-term, outcome-oriented goals for... crosscutting policy areas" every four years. New comprehensive supplementary indicators could support such whole-of-government goal-setting and assessment.

INITIATIVES

Modernize U.S. national indicators by creating a bipartisan expert commission

While advances in data availability and statistics have enabled the creation of 21st Century indicators of progress, Congress is ill-equipped to expediently and accurately resolve the complex methodological questions inherent to such an undertaking. Instead, Congress should delegate the job to a bipartisan commission of experts.

RECOMMENDATIONS

Congress should pass legislation to:

1. Set parameters for a series of four new national indicators;
2. Delegate technical decisions to a new "**National Indicators Commission**" composed of experts selected on a bipartisan basis; and
3. Charge the commission with establishing an action plan for implementing new indicators in federal statistical work.

National Indicators Commission

The bipartisan commission's key responsibilities would be to determine the formula and pricing guidelines for the four new indicators described below and to detail in an "indicator development plan" recommendations for computing, aggregating, and reporting the new indicators.

Commission Membership: The president, in consultation with the leadership of both parties in Congress, would appoint four commissioners based on expertise in relevant fields. The president could appoint eight additional qualified commissioners, no more than four of whom could be of the same party. To minimize costs, commissioners would be unpaid and staff would, where possible, be seconded from the statistical agencies.

Process: The commission would have up to two years to submit an "indicator development plan" to the president, who could either approve the plan without amendment or return the plan to the commission with recommendations for revision. If the president accepts the indicator development plan, the Bureau of Economic Analysis, in consultation with the Interagency Council on Statistical Policy, would be required to begin implementing the plan, as described below.

INDICATORS

Design new measures that are likely to impact policy while overcoming the methodological uncertainties and political complexities inherent to indicator design

The search for potent, accurate, and feasible supplements to GDP begins with appropriate indicator design. How can new indicators be constructed to reflect widely-shared social and economic priorities while overcoming methodological obstacles?

RECOMMENDATIONS

New national indicators should:

1. Be expressed as a single, aggregate number;
2. Use dollars as the unit of measurement; and
3. Comprehensively quantify a precisely-defined dimension of policy-relevant wellbeing.

Using these guidelines, this section proposes four new indicators of national wellbeing to complement GDP. Congress should task the bipartisan National Indicators Commission with settling unresolved methodological issues and determining the specific construction of each new indicator.

Aggregated Indicators vs. Disaggregated Dashboards

Aggregating multiple variables into a singular indicator is preferable to creating a dashboard of disaggregated variables, given the narrative potency of a singular number. While more and more data is available each year, GDP retains its position as a headline indicator of national progress because it is a succinct (albeit incomplete) summary of data regarding the state of the economy.

FINDING

Choose a small number of aggregate indicators over a disaggregated dashboard of many variables in order to maximize impact.

Indicator Framework: Subjective vs. Composite vs. Adjusted-GDP

A few dozen aggregate indicators have already been proposed to stand beside GDP. Though this report does not recommend that the U.S. government simply pick one of these existing indicators for usage without modification, their designs are instructive for the creation of a new government indicator series. The existing indicators can be divided into three main categories:

1. **Adjusted-GDP Measures (e.g. the Genuine Progress Indicator):** these indicators begin with GDP (or some component thereof), altering the dollar figure to account for a wide range of wellbeing-relevant variables excluded from the traditional measure. Common adjustments include discounting GDP for income inequality, subtracting components of GDP seen as not contributing to wellbeing (e.g. defensive expenditures associated with increasing crime), and imputing prices for nonmarket variables that either contribute to wellbeing (e.g. household labor) or detract from it (e.g. pollution). Incorporating benefits and costs excluded from GDP yields a dollar-denominated expression of policy-relevant wellbeing that internalizes market externalities.
2. **Composite Indexes (e.g. the Human Development Index):** these measures assess relative performance on a series of wellbeing-relevant variables to arrive at a final number between zero and one. The indexes are assembled by first picking the variables (e.g. educational attainment, income, pollution levels) and then creating a zero to one scale of relative performance for each variable, based on a range of plausible achievement. The performance scores then typically are averaged (with equal weighting) to determine the final index number.
3. **Subjective Indicators (e.g. Gross National Happiness):** these measures employ the logic that the best judges of a people's wellbeing are the people themselves. Relying on surveys that ask respondents to rate their quality of life, these measures intend to capture a nation's average wellbeing, typically expressed as an index. Surveys range in complexity from a single question (e.g. All things considered, how would you rank your quality of life?) to the 5.5-hour survey used to compute Bhutan's Gross National Happiness. While aggregation methodologies differ, all subjective measures rely on self-reported wellbeing.

Each of these formats offers inherent strengths and shortcomings in the realms of impact, accuracy, and feasibility. Of the three primary types of alternative wellbeing indicators, the adjusted-GDP framework is best suited to supplement GDP. Subjective measures have shortcomings in impact (e.g. capturing factors not related to policymaking), accuracy (e.g. typically reflecting myopic views of wellbeing), and feasibility (e.g. requiring new data collection initiatives). Composite indexes present irreconcilable accuracy challenges (e.g. arbitrarily weighting distinct variables as equally contributing to prosperity) and inferior narrative potency (e.g. using a non-dollar denominated scale that limits comparability with GDP). The adjusted-GDP framework offers a more powerful policy tool with greater accuracy potential.

FINDING
Choose adjusted-GDP as the indicator framework best suited to parallel GDP.

Variable Selection

Four new indicators should be created to assess four precise definitions of national progress: G2 for current prosperity, G3 for durable prosperity, G4 for current wellbeing, and G5 for durable wellbeing. Each new indicator includes a tailored list of GDP adjustments. This series of progress benchmarks would stand alongside GDP, which would become G1, in the same way that the federal government uses U1 through U6 as complementary measures of unemployment. This series of 21st-Century indicators offers the opportunity to redefine policymaking success.

The table below presents a range of variables that could be included in the new series of indicators. Their diversity in terms of ideological appeal underscores the strong potential for political consensus around new indicators.

MENU OF VARIABLES FOR NEW INDICATORS

Accidents: accounting for the costs associated with motor vehicle, industrial, and other accidents

Biomes: accounting for net changes in the expanse of valuable biomes

Commuting: accounting for the cost of commuting time

Consumption: the standard aggregate consumption measure used in GDP (Personal Consumption Expenditures)

Crime: accounting for the costs associated with crime

Education: accounting for net changes in the stock of education available to the economy

Entrepreneur: accounting for the value of innovation and entrepreneurship

FamilySep: discounting doubly-purchased items due to family separation

Free: accounting for the value of free goods and services provided by volunteers, Web-based platforms, or other non-government actors

Health: accounting for the spillover gains of preventive health, and net changes in the stock of health available to the economy

Household: accounting for the value of household labor

Informal: accounting for the value of informal economy activity (beyond household labor

Intellectual: accounting for changes in intellectual investments (e.g. research and development)

Intermediate: removing or discounting intermediate goods and services included in GDP

Leisure: accounting for the value of leisure time

Machinery: accounting for net changes in the stock of physical capital, including machinery and housing

Mobility: discounting for income and/or wealth inequality

NatlDebt: accounting for changes in the national debt above a certain threshold

NetExport: adding national exports minus imports

PersDebt: discounting for unsustainable personal debt levels

Pollution: accounting for the costs of air, water, noise, or other sorts of pollution

Public: accounting for the value of government-provided services that are freely consumed or enjoyed

Resilience: accounting for net changes in the capacity to recover from disaster

Social: accounting for the value of community and organizational interconnectivity

Subsoil: accounting for changes in the stock of nonrenewable resources

Variety: accounting for changes in the variety of products and services available

To avoid skewed and confusing wellbeing assessments, the process of picking variables from this list should be neither arbitrary nor subjective. Two steps are essential but often overlooked prerequisites for choosing variables:

1. Naming the particular wellbeing function that the indicator seeks to measure, so as to determine the range of variables that count as valid inputs. For example, the degree of leisure time would be a valid input for assessing general wellbeing, but not for more narrowly assessing economic prosperity.
2. Naming the criteria used to assess the worth of including each valid variable. For example, will variables be included to the extent that data is available, to the extent that their calculation is methodologically sound, or both?

To address the first step, alternative indicators too often name their objective functions in imprecise terms: "development," "progress," or "wellbeing." Without more concrete definitions of what constitutes success or failure, indicators risk including variables that cannot be defended as inputs for the desired output (or excluding other variables that would indeed be valid inputs), resulting in a muddled aggregate number with unclear implications.

Among the several dozen existing indicators, there seem to be two main cleavages in the implicit objective functions: current vs. durable wellbeing, and economic vs. general wellbeing. Such distinctions are important. Durable wellbeing should include assessments of changes in resource "stocks" that indicate future potential (e.g. accounting for depreciation of the stock of physical capital, growth in the stock of education, etc.). To include such variables in an assessment of current wellbeing would conflate purposes. Similarly, indicators should offer a coherent answer to the question, "Are social and environmental wellbeing considered only insofar as they contribute to economic wellbeing, or are they to be treated as ends in and of themselves?" The latter would make sense for a benchmark of general progress (for which we use the term "wellbeing") but not for a narrower measure of economic progress (for which we use the term "prosperity").

Presented on the next page is a two-by-two matrix based on these two primary distinctions, resulting in four indicators (one per quadrant) that assess progress on four distinct goals: current prosperity, durable prosperity, current wellbeing, and durable wellbeing. The objective function is stated for each quadrant. The chart also considers which wellbeing- and policy-relevant variables (from the list above) would count as a valid contribution to the particular type of wellbeing being measured. For each qualifying variable, the adjustments that would be performed are listed in the relevant quadrants.

Summary of GDP Adjustments for Four New National Indicators

Current Prosperity

This type of indicator comes closest to what GDP attempts to measure. Indeed, it starts with personal consumption expenditures, a critical component of GDP. Yet, it makes three types of adjustments to provide a more accurate gauge of a median person's felt economic experience. First, the measure adds in goods and services that contribute to economic prosperity but are not counted as consumption because they are free of charge, such as those provided in the home (e.g. family dinners), by the government (e.g. toll-free roads), by volunteers (e.g. litter cleanup), or by web-based firms (e.g. email accounts). Second, the measure subtracts goods and services that count as consumption but do not contribute to economic prosperity, such as replacements for damaged property or stolen items, or defensive expenditures (e.g. locks, alarm systems), which rise with crime rates.

Third, this indicator adjusts for the fact that different types of consumption offer different degrees of satisfaction. An increase in income or wealth—and thus, consumption—at lower income/wealth levels tends to bring greater satisfaction than at higher income/wealth levels. Current Prosperity is thus adjusted to account for income and wealth inequality. Similarly, consumption that must be financed by an onerous degree of personal debt is thought to contribute less satisfaction than debt-free spending. The measure discounts consumption financed by debt levels above a given debt sustainability threshold.

Durable Prosperity

This type of indicator makes all of the adjustments under Current Prosperity, but accounts for changes in various stocks necessary for future economic growth. In the same way that Net Domestic Product adds investment in the physical capital stock but subtracts capital depreciation, this category accounts for net marginal changes in stocks critical for sustained economic activity: physical capital (e.g. machinery and housing), natural capital (e.g. biomes and subsoil resources), human capital (e.g. education and health levels), financial capital (e.g. national debt levels above a certain threshold), etc. The measure also adjusts for changes in levels of innovation and entrepreneurship, which influence the degree to which such stocks will be leveraged in future years. This indicator also subtracts the net present value of future inhibited economic activity caused by current-year factors such as crime (e.g. future reduction in sales) and pollution (e.g. future reduction in usability of land or water supplies).

Current Wellbeing

This indicator includes all the adjustments made to Current Prosperity, but also values social and environmental factors beyond their contribution to economic progress. The measure adds positive social variables (e.g. leisure time), subtracts negative social variables (e.g. commuting time), adds positive environmental variables (e.g. the existence value of a forest), and subtracts negative environmental variables (e.g. smog). This type of indicator probably comes closest to measuring policy-relevant happiness given that humans tend to depend on current economic, social, and environmental inputs for happiness, but tend to myopically discount prospects for future progress in estimations of their wellbeing (e.g. few people consider the extent of entrepreneurship in assessing their happiness). This quadrant offers a more policy-relevant companion to subjective wellbeing measures.

Durable Wellbeing

This broadest category includes all of the adjustments in the three prior categories. It also includes adjustments to reflect the net present value of future social and environmental impacts resulting from current-year policies. For example, consider the destruction of an acre of forest and the construction of a housing subdivision in its place. Current Prosperity already measures the additional goods and services consumed to eliminate the forest and to build and use the subdivision. Durable Prosperity already captures the natural capital loss of timber and ecosystem services, while Current Wellbeing measures the loss of that forest's existence value for the current year. Durable Wellbeing would additionally capture the net present value of the forest's lost existence value for future years.

The resulting indicators would look as such, listed in the order in which they expand on GDP's narrow original purpose:

- ***G1: Gross Domestic Product***
- ***G2: Current Prosperity***
- ***G3: Durable Prosperity***
- ***G4: Current Wellbeing***
- ***G5: Durable Wellbeing***

FINDING
Four new national indicators—G2, G3, G4, and G5—should be created to provide four supplementary measures of national progress.

NATIONAL INDICATORS FOR A NEW ERA

	ECONOMIC	GENERAL
CURRENT	**G2** **CURRENT PROSPERITY** *Measuring this year's purchasing power satisfaction* **Start with personal consumption expenditures** **+/-** Add net exports **–** Subtract for debt-financed consumption above a critical threshold **+** Add the value of increased good/service variety **–** Subtract for income/wealth inequality **+** Add the value of unpaid goods/services from household labor, volunteers, and online platforms **+** Add the value of unpaid goods/services from the public sector **+** Add the value of informal sector goods/services **–** Subtract the loss of stolen goods **–** Subtract property damage from accidents **–** Subtract defensive expenditures (e.g. locks) **–** Subtract intermediate goods and services **–** Subtract superfluous purchases from family separation	**G4** **CURRENT WELLBEING** *Measuring this year's satisfaction from purchasing power, societal health, and the environment* **Start with G2** **+** Add the value of willful leisure time **+** Add the utility value of community cohesion **+** Add the spillover gains of preventive health **–** Subtract the utility loss of environmental degradation (e.g. smog) **–** Subtract the utility loss of commuting time **–** Subtract the psychological/physical injury of crime or accidents **+/-** Add/subtract the existence value change of biome gain/loss
DURABLE	**G3** **DURABLE PROSPERITY** *Measuring this year's purchasing power satisfaction, while accounting for future potential satisfaction* **Start with G2** **+/-** Add/subtract changes in stocks of physical capital, human capital (health/education), financial capital (national debt), intellectual capital (R&D), and social capital **+/-** Add/subtract changes in stocks of natural capital: land/air/water rendered unusable, biome gain/loss, and net changes in stocks of subsoil resources **+/-** Add/subtract changes in entrepreneurship **–** Subtract future economic damage (net present value) from current-year pollution **–** Subtract potential business losses from crime **–** Subtract productive capacity loss from accidents **+/-** Add/subtract net changes in the capacity to recover from disaster	**G5** **DURABLE WELLBEING** *Measuring this year's satisfaction from purchasing power, societal health, and the environment, while accounting for future potential satisfaction* **Start with all adjustments in G2, G3, and G4** **+/-** Add/subtract the effect of current biome gain/loss on future biome existence value (net present value) **+** Add the future utility gains (net present value) of current community cohesion **+** Add the future spillover gains (net present value) of current preventive health **-** Subtract the future psychological/physical damage (net present value) of current crime or accidents

Some analysts may argue that keeping GDP as G1 and placing the supplemental indicators in a succeeding series will undermine the narrative or policymaking importance of the new indicators. They may fear that press and policy debates would continue focusing exclusively on G1, while G2 through G5 would remain largely academic ideas. Yet, such has not been the case with the unemployment measures that serve as the model for this series format. Since the Bureau of Labor Statistics introduced the broader unemployment measures U4-U6 in 1995, the new measures have regularly captured headlines and influenced policy debates, particularly when the official unemployment measure (U3) falls out of sync with the figure capturing full underemployment and unemployment (U6). If broader unemployment indicators are being publicly used as a rubric of policymaking success, broader prosperity indicators can fill the same purpose. It is not difficult to imagine the narrative power of headlines like "GDP Growth Sluggish, But Wellbeing Rising" or graphs that reveal a growing gap between G1 and G3, sparking the question of why current growth is coming at the expense of future growth. As with U6, the incorporation of these new indicators into media and policymaking debates could catalyze a shift to a more comprehensive definition of national progress.

INSTITUTIONS

Attain the requisite operational capacity to effectively produce new indicators in the executive branch

With more than 20 diverse statistical agencies and substantive data-sharing arrangements with state and local authorities, the federal government is well-equipped to begin developing the range of indicators prescribed in the previous section. Yet, given the multi-jurisdictional nature of the new set of indicators and the absence of an integrated U.S. national statistical agency, there are considerable coordination and standardization challenges inherent in this undertaking.

RECOMMENDATIONS

1. Multiple executive branch agencies should be involved in computing the subcomponents of new indicators according to the guidelines of the bipartisan National Indicators Commission's "indicator development plan;"
2. BEA should play a primary role in aggregating the new multi-jurisdictional indicators;
3. The Interagency Council on Statistical Policy, a multi-agency steering committee chaired by OMB can help translate the commission's findings, if accepted, into interagency standards and rules and assist with cross-departmental coordination; and
4. If necessary, Congress should act on the commission's findings by appropriating funding for new data collection and/or removing barriers to interagency information-sharing.

Roles: Computation, Aggregation, and Reporting

Computation

The first general task in the production of new indicators—computation—refers to the processes of collecting data and calculating the variables (e.g. the cost of property damage, the value of household labor, etc.) that would form component parts of an overall indicator (e.g. G2), as outlined above. This would entail compiling the relevant data and making computations in accordance with methodologies stipulated by the commission. No single agency could reasonably be expected to compute all included variables for a given indicator. Indeed, it is expected that a wide range of agencies, including but not limited to those listed in the table below, would take part in the computation process.

COMPUTING VARIABLES

Agency	Variable Subject Areas
Agency for Healthcare Research and Quality	Healthcare
Bureau of Economic Analysis (BEA)	National income, investment, nonmarket activity
Bureau of Justice Statistics (BJS)	Crime, incarceration
Bureau of Labor Statistics (BLS)	Unemployment, consumer prices, average earnings, productivity
Bureau of Transportation Statistics (BTS)	Commuting, energy
Census Bureau	Income, demographics, business, education, health, nonmarket activity, household assets
Centers for Disease Control and Prevention (CDC)	Health outcomes
Centers for Medicare and Medicaid Services (CMS)	Healthcare
Economic Research Service (ERS)	Agriculture, land
Energy Information Administration	Energy efficiency, air pollution
Environmental Protection Agency	Air and water quality, emissions
Federal Deposit Insurance Corporation	Banking
Federal Reserve	Household debt
Health Care Financing Administration (HCFA)	Healthcare
Internal Revenue Service (IRS)	Taxation
National Agricultural Statistics Service (NASS)	Agriculture, land
National Center for Education Statistics (NCES)	Educational quality and attainment
National Center for Statistics and Analysis (NTSA)	Transportation
Social Security Administration Office of Policy (OP)	Safety net, aging, disabilities

Aggregation

Unlike computation, a single agency would likely need to be responsible for the second task: aggregation of the various indicator components according to frameworks set by the commission. There are several reasons why BEA should play this role. First, BEA is widely viewed as having the highest level of technical capacity related to aggregate indicators. It compiles the national income and product accounts, which are themselves aggregates, and has periodically spearheaded the development of new prototype "satellite accounts." Second, BEA is widely perceived as politically insulated and therefore highly credible in its statistical work. This is essential for ensuring new indicators are accurate, and salient in policy debates and public discourse. Third, as the G2-G5 indicators would form a set of adjusted-GDP indicators to stand alongside GDP (as G1), it stands to reason that the new series should be aggregated in the same institution that currently compiles GDP. Fourth, as an agency that largely relies on other government institutions for data collection, BEA already has strong data-sharing linkages with offices such as the Census Bureau that would be involved in computing the new indicators.

Reporting

The final task—reporting the aggregated G1-G5 indicators—could fall on multiple agencies, including BEA, which currently reports GDP through its quarterly *Survey of Current Business*. OMB would also be an opportune place for reporting, given that the Government Performance and Results Modernization Act of 2010 requires the office to establish outcome-oriented, whole-of-government goals every four years. The new indicators prescribed in this report could serve as tools for outcome-based interagency performance measurement. The President's Council of Economic Advisers could also potentially report new G-series data as part of its annual Economic Report of the president, which reports GDP as part of an effort to survey the economic landscape.

CONCLUSION

The Time Is Ripe

Advances in statistics, computing, and data collection have made possible the meaningful estimation of national wellbeing. When the national income accounts were first developed, measuring and incorporating factors like health outcomes and nonmarket labor was not feasible. Today, we have overcome many such limitations. The proposal for a new commission on national indicators seeks to enable the United States to harness state-of-the-art thinking regarding indicator development. By delegating methodological questions to technical experts who are trusted across the ideological spectrum, it seeks to remove politics from the business of statistics. By aiming to supplement rather than replace GDP, it seeks to promote sound incremental change. By stipulating new indicators that offer a more comprehensive, longer-term picture of national wellbeing, the proposal seeks to restore U.S. leadership in the science of measuring progress.

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