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## Income Inequality: Real or Overblown?

The phrase “income inequality” has become something of a political buzzword in recent months as politicians and pundits decry a growing gap between the rich and poor. Many economists say that wages have fallen behind productivity gains over the past generation, and that dynamic is further squeezing the middle class and damaging the economy.

But Donald Boudreaux, professor of economics at George Mason University, disputes that notion. In a recent piece for The Wall Street Journal, Boudreaux, along with co-author Liya Palagashvili, argues there is no disconnect, or “decoupling” between productivity and worker pay if you use more accurate measures to gauge the two. *OUTLOOK* recently asked Boudreaux about this so-called “decoupling” of wages and productivity, and what it might mean to the economy, and whether the middle class is, in fact, disappearing because of it.

***OUTLOOK: Let’s start by looking at how wages and productivity are related.***

**Donald Boudreaux:** Wages and productivity have been tied together pretty closely since the beginning of the Industrial Revolution. Of course, there are variations from month to month and even year to year. But the overall relationship is that if productivity rises, wages rise. If productivity falls, wages fall. That’s been the case in all capitalist societies since as far as reliable records go back.

Worker productivity has always been the most significant factor in determining wages. It’s very simple: A cardiologist is paid more than a janitor because we value the cardiologist’s output more.

***OUTLOOK: Why is that relationship important for the economy?***

**DB:** Wages rise to reflect productivity growth – not because employers are good people, but because employers respond to competition. If a worker is paid \$15 an hour and then becomes more productive at a certain task, the employer across the street says, “come work for me and I’ll pay you \$16.” Workers who are underpaid are money-making opportunities for

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#### About this article



Donald Boudreaux is an economics professor at George Mason University and the author of "Hypocrites and Half-Wits: A Daily Dose of Sanity from Cafe Hayek and Globalization."

Boudreaux, who previously served as chair of George Mason's economics department, also pens a blog called, "Café Hayek," named for the late Austrian economist and philosopher F.A. Hayek. He also writes a regular column for the Pittsburgh Tribune-Review.

Boudreaux holds a doctorate in economics from Auburn University and a law degree from the University of Virginia School of Law.

profit-seeking employers. Other factors affect wages as well, such as labor unionization, work rules and regulations, but they don't affect the relationship between worker pay and productivity in a significant way.

Over time, that competitive process keeps wages aligned with productivity. Employers cannot afford to pay workers more than they produce or they will go out of business.

Generally speaking, the more value an employee can produce for the employer, the more that employee will be paid. For example, you can say sports stars are overpaid. But they possess rare skills that lots of people are willing to pay to see them perform. LeBron James produces enormous value in ticket sales and sports merchandise.

**OUTLOOK: You contest the popular notion that wages have stagnated over the past few decades. Please explain your argument.**

**DB:** The statistics that are used to look at trends in wages are flawed, which is why people believe workers' incomes have stagnated. The statistics don't adequately account for inflation changes, the composition of worker pay, changes in product quality and the overall nature of the economy.

Employers are paying their employees more, but it's going to workers in different ways. Consider fringe benefits, which now account for about 19 percent of worker pay compared with 10 percent 40 years ago. Worker pay since the 1970s has progressively included more non-wage benefits, yet we don't usually measure what employers contribute to workers' pension and health insurance premiums.

Employers also may be paying for long-term disability insurance and some pay for training and professional development.

Membership in the middle class seems to be declining, but that's because more American households are moving up.

***OUTLOOK: How is it that the statistics used to measure worker pay don't adequately account for inflation changes?***

**DB:** Productivity gains are adjusted for inflation using the GDP (gross domestic product) deflator, which, unlike the consumer price index, is adjusted over time to reflect changes in the kinds of goods and services people buy. By contrast, wage growth is adjusted for inflation using the CPI. The CPI gives a higher adjustment for inflation than the GDP deflator, so the rise in wages looks smaller than it truly is. Between 1970 and 2006, the CPI rose at an average annual rate of 4.3 percent, while the GDP deflator rose only 3.8 percent.

Each of these tools has its own flaws. Economist Diane Coyle has written about GDP and how methods for measuring it are outdated. We're still using the same market categories and growth measurement tools developed in the 1930s and 1940s, but our economy is so different today. We're not just producing more stuff, we have more variety and a broader range in product quality in categories from household furnishings to groceries. It's almost impossible to capture these changes in inflation measures when the method for calculating productivity underestimates improvements in our standards of living.

Take home furnishings. You can get a lot for your money at the low end. You can pay \$10 for a coffee table at IKEA and at the other end you can pay a luxury dealer \$5,000 for a coffee table. With that increased range, what ends up as an "average price" is difficult to capture and compare against averages from decades past when there were fewer furniture options overall and less at the low and high ends.

***OUTLOOK: But what about this notion that the middle class has stagnated in recent decades?***

**DB:** Membership in the middle class seems to be declining, but that's because more American households are moving up.

Census data from 2012 showed that between 1975 and 2009, the percentage of U.S. households in the low- and middle-income categories fell. If you measure earnings in 2009 dollars, the only two categories that saw an increase were households earning \$75,000 and \$100,000, and households earning more than \$100,000 annually. Again, in 2009 dollars, 20 percent of American households earned more than \$100,000 in 2009, compared

Because the rich shoulder a greater share of the tax burden than the poor, if you compare a rich worker's income to a poor worker's income, the gap between them is much greater before taxes are taken out.

with just over 8 percent in 1975. The percent of households earning annual incomes of \$50,000 or less fell during that same period, from 58 percent to 50 percent.

**OUTLOOK:** *How do you account for the gap between the rich and poor we hear so much about?*

**DB:** Instead of just comparing pay, what people earn, look at household spending power. To get the truest assessment possible of a household's spending power, you need to look at post-tax, post-transfer incomes, which many statisticians do not do. Because the rich shoulder a greater share of the tax burden than the poor, if you compare a rich worker's income to a poor worker's income, the gap between them is much greater before taxes are taken out.

This distortion only grows if you don't count government transfers, such as Social Security. A lot of these studies exclude Social Security or the value of Medicare. Take a retired couple that's made a good living and now they are living off of assets and some annuity income. However, they also receive Social Security. They buy a retirement home in Florida. On paper, they may look poor because many studies only look at conventional incomes.

You can't come to any conclusions about these statistics until you understand what they involve.

**OUTLOOK:** *Much of the public conversation around income inequality focuses on executive pay. Has CEO pay risen at disproportionate rates to other work classes?*

**DB:** Again, there is a lot of statistical delusion when measuring growth in worker pay. We talked about fringe benefits earlier. You often hear about workers' monetary wages but not about their fringe benefits, whereas calculations of CEO pay typically include base salary, bonuses and fringe benefits. You also need to look at hours worked, not just annual wages. A production line-worker may work 40 hours, while a CEO logs 70 hours and is always on call. If you compare pay on per hour basis, there's a smaller gap than comparing on an annual basis.

Top-notch CEO talent is very rare. That is a really hard job. People have this image that the typical CEO has a cushy job with great pay and that he or she spends all of their time going to cocktail parties and sitting in board meetings

in comfy chairs. But real CEOs are often making decisions in many cases about how billions of dollars are being invested. None of these decisions are being made under conditions of certainty. Much of it's speculative. It's hard work and stressful work.

There are indeed cases of managerial incompetence, but when you look at the landscape of business, their collective value continues to rise. That tells you that the decision-makers by in large tend to do a good job.

***OUTLOOK: You mentioned household spending power. Are paychecks going as far as they once did, given the rising costs of food and health care?***

**DB:** Actually, Americans are spending a lower percentage of their incomes on basic living costs. In some categories, the inflation-adjusted prices have fallen, such as retail clothing.

There are three big categories – housing, post-secondary education and health care – in which real prices for ordinary people have risen over the past three to four decades. But even within those categories, some average higher prices reflect consumer choice.

The average American house was smaller than 1,000 square feet in 1950. Now it's well more than 2,000 square feet. Houses today have more amenities. It's common to expect central air, garbage disposals, built-in microwaves. That was not true 40 years ago. You paid extra for those things. And more people are choosing to buy more. A third of American households had more than one car in the 1970s. Now it's 57 percent. In the 1970s, only 40 percent of households had more than one TV. Now the average per home is 2.5 TVs. We choose to have an automatic dishwasher, a clothes dryer.

The increasing prevalence of these goods in American households obviously means they are more affordable. Americans are richer on those fronts.

***OUTLOOK: What about education and health care?***

**DB:** Those are more complicated. One unfortunate effect of the government guaranteeing loans for college students is that those guarantees don't make college more affordable. Instead, they just push up tuition costs. And there are tons of things wrong with the health-care market, before and since Obamacare. The chief reason why the real cost of health care has risen is because a large chunk has been socialized since 1965. Today, 15 percent of the population – the elderly – receive Medicare and they're using more than 15 percent of the resources because naturally, due to age, they have more health issues.

When you are spending other people's money you are less careful than if you were paying on your own, which allows health care providers, not just doctors but hospitals and pharmaceutical companies, to raise their prices more indiscriminately. By contrast, private insurers have strong incentives to keep track of how their customers spend their money.

**OUTLOOK: Besides health care, Americans are feeling pinched from the rise in cost of some necessities, like food staples.**

**DB:** Prices for certain staples have increased. But again, when you look at average consumer prices, what GDP statistics don't show is the value people derive from products in which variety and quality have increased dramatically.

**OUTLOOK: Can you give an example?**

**DB:** Take coffee. Before 1990, I drank the likes of Maxwell House and so did most people, unless they lived in San Francisco and a few other places. Maxwell House tasted fine because I didn't know any different. Now I can't drink it. The options and quality available are so much better than 30 years ago. People still have the option to drink Maxwell House and spend less money on coffee, but many don't. You can say the same thing about beer.

The supermarket is another good example of where variety is undervalued. In the mid-1970s, the typical U.S. supermarket carried 5,000 kinds of goods. Today there are 43,000. That variety provides greater satisfaction, but how do you capture that in the GDP statistics, which of course, provide the basis of our definition of productivity?

**OUTLOOK: So if the middle class isn't disappearing, what are they spending their money on?**

**DB:** Once you put savings aside, Americans are going to spend 100 percent of what they earn. When prices for certain goods, such as clothing, furniture and consumer electronics, decline, Americans then spend a higher percentage of what they make on the remainder of things, including housing and health care.

It may be that those things are more expensive in real dollars, but we can't say that just because we are spending more on health care it's entirely wrong. The percentage of Americans who spent a share of their income on LASIK eye surgery in 1980 was zero. Now, more than 2 million people have paid thousands of dollars for the procedure. That's a cost we're voluntarily incurring. We are clearly better off for that.

There are genuine, undoctored statistics that suggest the American middle class has stagnated. This is not false data. But the statistics are out of context. You need to look at what's included in the numbers and what's been left out.

It may be that because health-care costs are higher Americans are worse off, but you can't make that conclusion solely on the fact the inflation-adjusted cost of resources is higher. There are genuine, undoctored statistics that suggest the American middle class has stagnated. This is not false data. But the statistics are out of context. You need to look at what's included in them and what's been left out.

I am completely convinced that this narrative that the American middle class has stagnated is utterly false. I don't think things have been paradise but the material living standards are not only higher today, they are higher by orders of magnitude.

***OUTLOOK: Much of the current political conversation focuses on addressing growing income inequality, yet you argue it is basically a myth. What's the most important thing government should do in this area?***

**DB:** Ignore it. Income and wealth differences in a free market mostly reflect differences in lifestyle, savings and career choices. Sure, there are other factors in play; there is some unfairness. Our world will never be ideal. But it's unlikely that giving government more power to redistribute incomes or wealth will make things *more* fair. I'm pretty sure that it'll make things less fair. However distressed you might be about differences in monetary incomes, you should be far more distressed about differences in political power and influence. Calling on government to play Robin Hood might – *might* – make you more monetarily equal, but it will surely make us both less free and more unequal in terms of the amount of political power that some of us exercise over others. ■

# Interest Rates and Economic Indicators

The interest rate and economic data on this page were updated as of 4/30/14. They are intended to provide rate or cost indications only and are for notional amounts in excess of \$5 million except for forward fixed rates.

## KEY ECONOMIC INDICATORS

Gross Domestic Product (GDP) measures the change in total output of the U.S. economy. The Consumer Price Index (CPI) is a measure of consumer inflation. The federal funds rate is the rate charged by banks to one another on overnight funds. The target federal funds rate is set by the Federal Reserve as one of the tools of monetary policy. The interest rate on the 10-year U.S. Treasury Note is considered a reflection of the market's view of longer-term macroeconomic performance; the 2-year projection provides a view of more near-term economic performance.

## ECONOMIC AND INTEREST RATE PROJECTIONS

Source: Insight Economics, LLC and Blue Chip Economic Indicators

### US Treasury Securities

2014	GDP	CPI	Funds	2-year	10-year
Q2	3.00%	1.80%	0.09%	0.51%	3.07%
Q3	3.00%	2.10%	0.11%	0.66%	3.22%
Q4	3.10%	1.90%	0.13%	0.85%	3.37%
2015	GDP	CPI	Funds	2-year	10-year
Q1	3.00%	1.90%	0.19%	1.05%	3.49%
Q2	3.00%	2.00%	0.31%	1.24%	3.61%

## PROJECTIONS OF FUTURE INTEREST RATES

The table below reflects current market expectations about interest rates at given points in the future. Implied forward rates are the most commonly used measure of the outlook for interest rates. The forward rates listed are derived from the current interest rate curve using a mathematical formula to project future interest rate levels.

## IMPLIED FORWARD SWAP RATES

Years Forward	3-month LIBOR	1-year Swap	3-year Swap	5-year Swap	7-year Swap	10-year Swap
Today	0.23%	0.27%	1.01%	1.77%	2.27%	2.71%
0.25	0.24%	0.33%	1.20%	1.92%	2.39%	2.81%
0.50	0.26%	0.45%	1.40%	2.09%	2.52%	2.91%
0.75	0.34%	0.63%	1.61%	2.26%	2.66%	3.01%
1.00	0.49%	0.85%	1.82%	2.42%	2.78%	3.11%
1.50	0.97%	1.41%	2.24%	2.74%	3.03%	3.30%
2.00	1.56%	1.96%	2.62%	3.01%	3.21%	3.46%
2.50	2.03%	2.33%	2.88%	3.21%	3.38%	3.58%
3.00	2.49%	2.71%	3.15%	3.40%	3.55%	3.69%
4.00	3.00%	3.22%	3.46%	3.65%	3.76%	3.85%
5.00	3.37%	3.55%	3.71%	3.81%	3.89%	3.95%

## HEDGING THE COST OF FUTURE LOANS

A forward fixed rate is a fixed loan rate on a specified balance that can be drawn on or before a predetermined future date. The table below lists the additional cost incurred today to fix a loan at a future date.

## FORWARD FIXED RATES

### Cost of Forward Funds

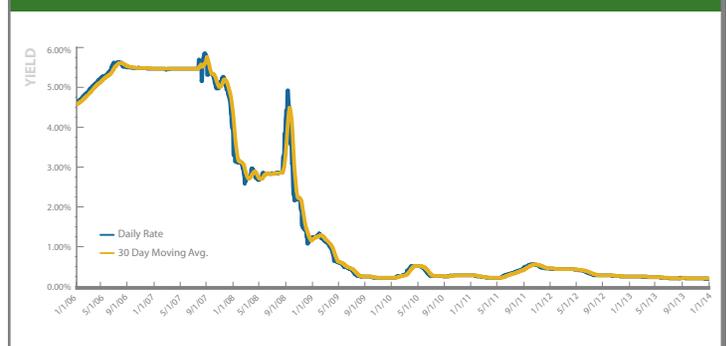
Forward Period (Days)	Average Life of Loan			
	2-yr	3-yr	5-yr	10-yr
30	8	9	8	6
90	18	22	19	14
180	33	42	37	26
365	81	88	73	51

Costs are stated in basis points per year.

## SHORT-TERM INTEREST RATES

This graph depicts the recent history of the cost to fund floating rate loans. Three-month LIBOR is the most commonly used index for short-term financing.

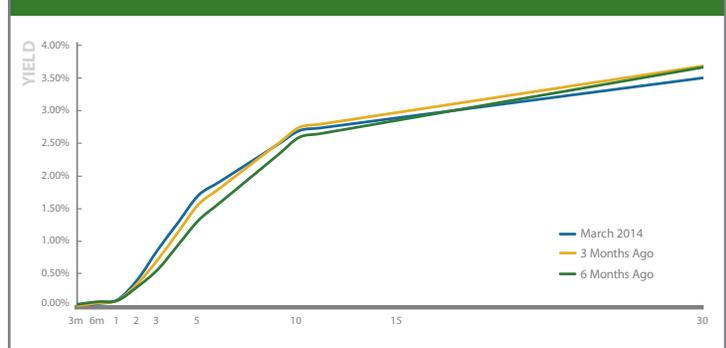
## 3-MONTH LIBOR



## RELATION OF INTEREST RATE TO MATURITY

The yield curve is the relation between the cost of borrowing and the time to maturity of debt for a given borrower in a given currency. Typically, interest rates on long-term securities are higher than rates on short-term securities. Long-term securities generally require a risk premium for inflation uncertainty, for liquidity, and for potential default risk.

## TREASURY YIELD CURVE





### About CoBank

CoBank is a \$102 billion cooperative bank serving vital industries across rural America. The bank provides loans, leases, export financing and other financial services to agribusinesses and rural power, water and communications providers in all 50 states. The bank also provides wholesale loans and other financial services to affiliated Farm Credit associations serving farmers, ranchers and other rural borrowers in 23 states around the country.

CoBank is a member of the Farm Credit System, a nationwide network of banks and retail lending associations chartered to support the borrowing needs of U.S. agriculture and the nation's rural economy.

Headquartered outside Denver, Colorado, CoBank serves customers from regional banking centers across the U.S. and also maintains an international representative office in Singapore.

For more information about CoBank, visit the bank's web site at [www.cobank.com](http://www.cobank.com).

*Commentary in Outlook is for general information only and does not necessarily reflect the opinion of CoBank. The information was obtained from sources that CoBank believes to be reliable but is not intended to provide specific advice.*

## CoBank Reports First Quarter Financial Results

CoBank earlier this month announced financial results for the first quarter of 2014.

Net income for the first quarter rose 11 percent to \$231.3 million, from \$208.8 million in the first quarter of 2013. Profitability increased due to higher net interest income, the lack of a provision for loan losses and higher noninterest income.

Net interest income for the quarter increased 2 percent to \$309.0 million, from \$302.4 million in the same period last year. Higher average loan volume was a key driver of the increase, as were higher earnings derived from the bank's balance sheet positioning.

Average loan volume rose 4 percent in the first quarter to \$76.4 billion, from \$73.4 billion in the same period last year. The increase resulted from higher levels of borrowing in a number of customer segments, including affiliated Farm Credit associations, rural power providers and food and agribusiness companies, partially offset by lower seasonal borrowing by grain and farm supply cooperatives.



*Robert B. Engel*

"We're very pleased with our results for the quarter and the strong start we've experienced this year," said Robert B. Engel, CoBank's chief executive officer. "Demand for credit strengthened in some areas of the rural economy, and we continued to benefit from strong credit quality in our loan portfolio. CoBank remains well positioned to meet the financial needs of its customers and to continue fulfilling its mission of service to rural America."

No provision for loan losses was taken in the first quarter of 2014, whereas the bank recorded a \$15.0 million provision in the same period last year. Noninterest income increased to \$38.3 million in the first quarter of 2014 compared to \$25.8 million in the same period last year, due to a decrease in losses on early extinguishments of debt, net of prepayment income, and gains on the sale of investment securities.

At quarter-end, 0.71 percent of the bank's loans were classified as adverse assets, unchanged from December 31, 2013. Nonaccrual loans were \$150.1 million at March 31, 2014, compared to \$147.8 million at December 31, 2013. The bank's allowance for credit losses totaled \$614.9 million at quarterend, or 1.62 percent of non-guaranteed loans when loans to Farm Credit associations are excluded.

Capital levels remain well in excess of regulatory minimums. As of March 31, 2014, shareholders' equity totaled \$6.8 billion, and the bank's permanent capital ratio was 15.7 percent, compared with the 7.0 percent minimum established by the Farm Credit Administration (FCA), the bank's independent regulator.

At quarter-end, the bank held approximately \$23.3 billion in cash and investments and had 164 days of liquidity, which was in excess of FCA liquidity requirements.



*David P. Burlage*

“We continue to manage our capital position and look for opportunities to further enhance our capacity and optimize our overall cost and quality of capital,” said David P. Burlage, chief financial officer.

Despite loan volume growth in the first quarter, Engel noted that it is premature to predict how demand for credit and financial services in the industries served by the bank will trend across the balance of the year.

“Some of the market conditions we experienced last year, including extremely low grain volumes at country elevators, have improved,” Engel said. “However, we continue to face other market challenges, including intense competition and a low interest rate environment that has pressured returns on invested capital for all banks. As always, CoBank is focused not on short-term results but on maintaining the financial strength of the bank, operating efficiently, delighting our customers and fulfilling our mission in rural America.” ■