

ECONOMICS U\$A
21st Century Edition

PROGRAM #15

GNP/GDP
WHAT'S IT ALL ABOUT?

AIRSCRIPT

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Final Transcript

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DAVID SCHOUMACHER: In the 1930s, the American economy went bust. A frustrated Congress asked, "Was there no way to measure the depths of the Great Depression?" As the United States was pulled into World War II, how did a system of accounting become the key to building the American arsenal? Until the late 1980s, America's measurement for economic growth was called the Gross National Product, or GNP. Then it was changed to the Gross Domestic Product, or GDP. Why was it changed and did it make any difference? Most of us tend to decide how well we're doing economically by what we can afford to buy...new clothes, new cars, or a new home. But can we calculate an entire nation's economic well being by adding up all those individual measurements? And can we compare those national figures over a period of time to determine if our economy is making progress? U.S. Economic Growth: We used to call it the Gross National Product or GNP. Now we call it the Gross Domestic Product or GDP. But just what is GDP? With Economic Analysts Nariman Behravesh and Richard Gill, we'll explore that question on this 21st-Century edition of Economics U\$A. I'm David Schoumacher.

(MUSIC PLAYS—OPENING TITLES)

PART I

DAVID SCHOUUMACHER: These computer tapes, at the Bureau of Economic Analysis in Washington, hold the record of America's economic growth in the past fifty years. They provide instant access to the accounting system known as GNP. But when the United States faced its worst economic crisis...the Great Depression...no such measuring tool existed--until this report went to the Senate. A copy of *National Income: 1929 to 1932* is pretty hard to find today, but back in 1934 it was something of a best seller. 4500 copies were sold in just eight months...at 20 cents a copy. The report was put together by a team from the Department of Commerce in response to a Congressional demand for more information: What was the Great Depression really costing the American economy as a whole?

DAVID SCHOUUMACHER: Led in part by the rise of the auto industry, the economy grew rapidly in the 1920s, generating more jobs, more income, and more free time to spend enjoying it. As long as the factories were humming, the cash registers ringing, and the paydays arriving, there was little concern about how well the nation was doing economically. But when the bottom dropped out in 1929, Congress was at a loss to decide how bad things actually were. As the lawmakers rushed to pass New Deal programs to bring the country out of the Depression, Senator Robert Lafollette wanted to know what was the state of the economy.

ROBERT LAFOLLETTE: "The greatest economic crisis in our history is a grave national emergency, which makes it imperative that we fight the Depression on all fronts. Congress must formulate a sound program to this end..."

DAVID SCHOUUMACHER: Lafollette's Senate Resolution directed the Commerce Department to make estimates of national income for the three previous years. Dr. Carol Carson has studied the developments of the national income accounts during the Depression.

CAROL CARSON: "You could look up and down your home block and see that people were unemployed and that incomes were dropping, but they had no idea nationwide what was going on. And the numbers that they were after were aggregate statistics."

DAVID SCHOUMAKER: The man called in to direct the official government study was Simon Kuznets. He had been working on income estimates for the National Bureau of Economic Research. At the time of the Great Depression, the lack of information about the economy was, in Kuznets' words, "a scandal." The data available were, as he put it, "neither fish nor flesh nor even red herring." When he arrived at the Commerce Department, Kuznets found he would be working with economist Robert Nathan, one of his former students.

ROBERT R. NATHAN: "He put me to work measuring some things for which we didn't have very direct data...we never had a service census...we never had a retail census...we never had a construction census...and the result was that there were a lot of gaps. And that's what made it so tough. But conceptually, Simon gave it a degree of depth and measurement-wise...a degree of reality that never had prevailed before."

DAVID SCHOUMACHER: One of Kuznets' basic concepts was to limit measurements to the marketplace. Thus, the amount people were paying for goods and services could be used to measure the consumption component. And the money spent on new production facilities...plants and equipment...gave a total for the investment category. But there was a problem: How to avoid double counting. In the flow of payments through the economic system, where do you measure? Take the creation of an automobile. The mine operator gets income from the sale of iron ore. The mill owner gets income from the sale of finished steel. The manufacturer gets income from the sale of the finished car. To avoid the inaccuracies of counting the same money three times, Kuznets decided to use only final sales...in this case, the amount paid for the automobile at the dealer's. If there is a need to know how much value was added along the way...say, at the manufacturer's...that can be found by deducting the cost of the finished steel from the amount paid for the car. But not all the nation's work is performed on

assembly lines or in department stores. As much as one fourth of the work in the economy is at home and no one gets income for it. Kuznets decided to exclude this work, primarily the cooking, cleaning, and childcare provided by housewives, because it was too hard to measure and because of the kind of work it represented.

CAROL CARSON: "He was shrewd. He didn't say, 'just housewives.' He said, 'housewives and other family members' services.' He considered that an integral part of the family rather than part of market production. And his emphasis was on market production. So, he felt that on that basis it could be excluded. Also, he recognized the difficulty of estimating housewives' services."

DAVID SCHOUMACHER: Illegal activities were also excluded ...money earned from bootleg whiskey and beer, smuggling, drugs, gambling and other criminal acts. This was also hard to estimate, but Kuznets had another reason.

CAROL CARSON: "Illegal activities were excluded largely because he had an orientation that wanted to measure the 'good' in society, and he felt that this was not a good, but a bad...or you could put it in terms of, he was interested in measuring services and illegal activities were considered a disservice. And the mere fact that there were laws against certain activities were what he used as the criterion for deciding what was a good or a bad, or a service or a disservice."

DAVID SCHOUMACHER: And goods and services that are exchanged or bartered are also not included because they cannot be measured. So, money had to be paid for the product or service for it to be included. Kuznets spent a year working with government departments and private agencies in Washington and across the nation. On January 4, 1934, the completed report was sent to the Senate and the nation had its most comprehensive economic measure...one that brought home the bad news. National income had fallen more than \$40 billion since 1929. Unemployment had increased seven-fold...12 million people were thrown out of work in three years. In the future, this concept would be renamed the Gross National Product, and when it was adjusted for

inflation, REAL GNP would give an accurate measure of growth in the volume of the economy's production. Thirty-seven years later, Simon Kuznets was honored for his work on national income and economic growth with the Nobel Prize. He was cited for "giving quantitative precision to economic entities."

Today, the Gross National Product is the ultimate benchmark that measures the expansion and contraction of our multi-trillion dollar national economy. It covers everything we make and sell in the marketplace. It's used by bankers, brokers and government officials to decide interest rates, investments, and tax rates. But how can anything so large and so complex be made simple enough to be useful? We put that question to economic analyst Richard Gill.

(MUSIC PLAYS - COMMENT & ANALYSIS I)

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RICHARD GILL: GNP is not really a simple concept. Yet it is extremely important for the whole area of macroeconomics. A careful consideration of this concept, for example, brings out the basic equivalence of production and income---the cornerstone of much macroeconomic analysis. In a very simple economy, we can describe economic transactions by means of what economists call the "circular flow." We have businesses here producing goods and services---GNP---and selling them to consumers like ourselves. We call them households. This is the upper loop. Down below we have these same households selling their services---their labor, for example---to businesses who use these services to create goods and commodities in the upper loop. The businesses pay the households for these labor and other services, thus creating a flow of money income to the households. The households, of course, use this income to buy the goods that businesses have produced. Now these two flows are basically equal. What, after all, is the source of the real income of the economy? Answer: the goods that the economy produces. So the studies of Kuznets and his colleagues did much to illuminate the macroeconomic structure of the economy, but also they did more. Imagine, for example, trying to plan a major war effort without knowing the size of the real GNP that your

economy is producing. As the nation prepared for World War II, this was no academic question.

PART II

FRANKLIN D. ROOSEVELT: “The militarists of Berlin and Tokyo started this war. But the massed, angered forces of common humanity will finish it.”

DAVID SCHOUMACHER: January 6, 1942. President Franklin Roosevelt is giving the country its marching orders. The success of those orders, as a strategy to win World War II, would depend on the American economy.

For months, the issue of how to prepare for war without getting involved in the actual fighting swung back and forth along Pennsylvania Avenue...from Congress to the White House. In the middle were the economists at the Commerce Department and other agencies. They were trying to answer the critical question: How much could the economy produce and how fast?

DAVID SCHOUMACHER: As the German armies moved through Western Europe in 1940, pushing Allied forces into the sea at Dunkirk, FDR could take only tentative steps in the face of pressures to keep America out of the war. In 1940, Congress agreed to only token increases in defense production and Roosevelt had to wait until after that year's presidential election to make his major move. On December 29, in a fireside chat to the nation, he called for a lend-lease program to aid the allies and \$1 billion for arms production.

FRANKLIN D. ROOSEVELT: “We... must be the great arsenal of democracy. For us, this is an emergency as serious as war itself.”

DAVID SCHOUMACHER: As the war in Europe led to more allied losses, plans for American aid increased. Special envoys were dispatched to London and Moscow to find out what war materials were needed. At home, the first mobilization committees were set up, bringing together business and labor. Robert Nathan, the chief economic planner for the arsenal of democracy, recalls that the first problem was convincing depressed industries to expand.

ROBERT R. NATHAN: "The steel industry, with great impact, came around and said, 'You're silly!' We were down to 15-20 percent of our capacity utilization for some years at the depths of a Depression. And it was a heck of a fight. But I can tell you this, I don't think that we would have ever won that battle if we hadn't had the GNP weapons to demonstrate what an overall fully employed economy could accomplish."

DAVID SCHOUMACHER: When the first plants began shifting toward munitions, and as the first liberty ships were being designed, there was another capacity that had to be measured and planned for: civilian needs. Why was it important to know how much could be diverted to the war without jeopardizing the basic supply of food, clothing, housing and transportation?

ROBERT R. NATHAN: "So if you didn't put it into civilians, people wouldn't be alive and who would produce the products? And you had to keep the schools going and, as much as you cut back, there was an awful lot that had to go to civilians. So we translated that..."

DAVID SCHOUMACHER: As the economists were preparing estimates, Roosevelt and Churchill met in the North Atlantic. The meeting in August, 1941, is best known for the Atlantic Charter of Rights for Free People. It was also the culmination of months of bargaining over what war materials the U.S. would supply the Allies. Shortly after the meeting at sea, Roosevelt asked the Army, Navy and Air Force to estimate the costs of an all-out war. Their total for the next two years: \$150 billion, almost double the Gross National Product in 1939. Nathan's next task was to take the military's production needs

and determine what was feasible. He started by breaking out the key sectors from the national income and production accounts.

ROBERT R. NATHAN: “One was steel, because we knew steel would be a limiting factor for tanks, ships, the big guns and the like. So, how much steel was involved in all these numbers? Then we translated the airplanes, mainly into aluminum, because you couldn’t build airplanes without aluminum. Then we translated ammunition into copper – so we had the key elements. Then, it seemed to us very soon that we were going to build factories to process a heck of a lot more steel than we had. So, you’d have fabricating plants that weren’t being used, or partly used, but more serious, you wouldn’t have any end products. You know, you’d end up with wheels over here and generators over there or parts of this and...”

DAVID SCHOUMACHER: You’d build planes without propellers...

ROBERT R. NATHAN: “That’s right, and no underpinnings and things of that nature.”

DAVID SCHOUMACHER: In the late fall of 1941, Nathan and his team sent their numbers to the White House as the debate continued over what production goals were realistic. Roosevelt was using them to reconcile the conflicting demands from the American military and from the Allies when the Japanese attacked Pearl Harbor. The United States was at war. Now the ability to convert the American economy, using the GNP information, would be critical for our own survival as well as for our Allies.

FRANKLIN D. ROOSEVELT: “...Our war program for the coming fiscal year will cost \$56 billion, or, in other words, more than half of the estimated annual national income. We shall produce 60,000 planes...We shall produce 25,000 tanks...We shall produce 55,000 anti-aircraft guns...We must convert every available plant and tool to war production.”

DAVID SCHOUMACHER: When Franklin Delano Roosevelt led the country into World War II, he depended heavily on the GNP framework to predict the kind of arsenal our democracy could become. In fact, the economy exploded during those four years. Seventeen million new jobs were created, the index of industrial production doubled, and the GNP grew 75 billion dollars. Economic analyst Richard Gill points out that estimates of the GNP were helpful in a number of ways during the war.

(MUSIC PLAYS - COMMENT AND ANALYSIS II)

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RICHARD GILL: Without knowing the size of our REAL GNP, it would have been virtually impossible to judge how much war production was physically possible. Also, there was the question of how many goods would be left over for civilian consumption and what taxes the government would have to levy to keep the economy from overheating. Look at our circular flow again. Production would normally flow from businesses to households who would pay for these goods with their money incomes generated by that production. Now the government steps in. At one point, we were using half our GNP for war production. And suddenly we faced a problem. Consumers still have these big incomes but they have only this much smaller trickle of consumers' goods coming to them. Knowing what these numbers are, one can at least make rough estimates of how much purchasing power the government has to drain away from the civilian economy so that we won't face a terribly inflationary situation. So, GNP Figures were very useful during the war, as they have in fact been in all of the decades since, which is not to say that they give a complete picture of the progress of our economy.

PART III

DAVID SCHOUMACHER: Black Monday, October 1987. In a single day, markets worldwide crashed. A long-lasting crisis in the savings and loan industry puts the financial well being of millions of Americans in jeopardy. The Gulf War reinforces

recession by causing oil prices to spike. Grim economic news welcomed Americans into the decade of the 1990s.

DAVID SCHOUMACHER: At this turbulent moment, our primary economic measure of well-being was changed from the Gross National Product, GNP, to the Gross Domestic Product, GDP. Why was this change made and how good a measure of our economic well being is GDP?

NIGEL GAULT: “In 1991, the Bureau of Economic analysis, who produce the numbers, they changed their primary focus from GNP to GDP. A couple of reasons...One, GDP is better designed to give information on the state of the business cycle within the United States, because it is focused only on activity within the United States. Secondly, most other countries were already focusing on GDP, so for international comparability it was easier for the U.S. to go along with what everyone else was using, which was GDP.”

DAVID SCHOUMACHER: What is the chief difference between GNP and GDP?

NIGEL GAULT: “GDP looks at production within a country. GNP looks at goods and services produced by U.S. residents wherever those goods and services might be produced.”

DAVID SCHOUMACHER: So GNP and GDP are numbers that represent the final value of goods and services we produce. But why do economists criticize these measurements for being an imperfect gauge of the country’s welfare?

ALFRED KAHN: “The failure of GNP to take into account environmental values, the fact that, for example...if we produce a lot of goods and services...if we use up machinery...that’s deducted as depreciation from GNP....or from Net National Product. But, if we dirty the atmosphere, if we pollute the air, if we make more people sick, if we cause more houses to have to be painted---that deterioration is not taken into account. Moreover---if it makes more people sick and they have to go to more hospitals and go to more doctors---that increases GNP.”

DAVID SCHOUMACHER: GDP, also fails to record certain services that contribute to our economy, like household labor, barter, cash only transactions, illegal or not, which make up our underground economy, and losses from environmental events. Take, for example, natural disasters. What impact do they have on GDP?

NIGEL GAULT: “If you have an environmental event, like a hurricane...causes a lot of damage, the value of the economy’s assets is reduced, but GDP is measuring actual production levels, and the fact that you lost assets, don’t immediately reduce production levels, so the environmental hit from a hurricane like Katrina, that’s not included.”

MAN IN RUBBLE: “That’s not very much, but it’s all we got.”

NIGEL GAULT: “Now...then in subsequent months...because capital has been destroyed, the level of production is subsequently reduced, that will be reflected, that will be counted in reduced output. But countering that, if there is output that is subsequently produced in order to repair damage that was caused by the hurricane, all that repair activity that will be included in GDP, even though you are just making good the damage that was caused by the hurricane.”

DAVID SCHOUMACHER: Does it make any difference that there is this problem in relating some factors of environmental events to GDP?

NIGEL GAULT: “Well, GDP is doing what it is supposed to. It is supposed to measure activity. It is not the best measure of welfare, and I think that’s the issue here. The way environmental events occur, they affect welfare, and if you are thinking about the damage to the environment, perhaps even from regular activity, if we are creating GDP, but at the same time damaging the environment by doing so, that is not going to get recorded in the GDP statistics, but it will affect welfare. So the issue here is that GDP is not a perfect measure of welfare, and should not be used as such.”

DAVID SCHOUUMACHER: So, if we're looking for a way to measure our well being, our satisfaction with our lives, then neither GNP nor GDP would be the ideal tool. On the other hand, as economists are prone to say, if we're only interested in the well being of our economy's recorded transactions, then both GNP and GDP are both equal to the task? So why did we go to the trouble of making the change? We asked Economist Nariman Behravesh for his opinion.

(MUSIC PLAYS - COMMENT AND ANALYSIS III)

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NARIMAN BEHRAVESH: Gross national product was designed as a measure of economic activity. It has been revised over the years to provide better estimates of the production of goods and services in the economy. For example, the switch from Gross National Product (GNP) to Gross Domestic Product (GDP) gives a better idea of what is produced within the United States—rather than what is produced by Americans—whether in the U.S. or elsewhere.

GDP is a far from perfect gauge of economic activity. For example, it does not measure the economic contribution of stay-at-home parents or output in the underground economy. It only measures activities for which there is a measurable market price. Similarly it does not take into account economic “bads” such as pollution. No, GDP is not a perfect measure of economic well being. Nor can it measure things like happiness. That said, higher levels of GDP per person are closely correlated with improved living standards (including health, education, leisure etc.), which in turn have a big positive influence on how people feel about their lives. Economists will continue to search for better ways to measure economic output. In the meantime, despite all its flaws, GDP is a pretty good gauge of what is going on in the economy.

DAVID SCHOUUMACHER: The development of the Gross Domestic Product or GDP, began more than 70 years ago as economists tried to explain the boom and bust swings of the business cycle. We've seen its development as a planning tool in times of crisis.

Today, when economists and government officials try to manage the economy to create jobs or raise revenue, it's changes in the GDP that tell them how well their decisions are working. For this 21st Edition of Economics U\$A, I'm David Schoumacher.

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