Demetri Kofinas:	00:00:00	Today's episode of Hidden Forces is made possible by listeners like you. For more information about this week's episode or for easy access to related programming, visit our website at hiddenforces.io, and subscribe to our free email list. If you listen to the show on your Apple podcast app, remember, you can give us a review. Each review helps more people find the show and join our amazing community. And with that, please enjoy this week's episode.
Demetri Kofinas:	00:00:48	What's up everybody? My guest today is Michael Pettis. Michael is a professor of finance at Peking University in Beijing, where he's been teaching since 2004. His research has focused mainly on Chinese financial markets, global trade and capital flows, and central banking. He spent 17 years on Wall Street, running fixed income trading and capital market desks. He's advised governments on privatizations of national banking systems and commercial bank debt restructuring and issuance. He's someone I've wanted on for a long time, and he's out with a new book, which publishes tomorrow called "Trade Wars are Class Wars." And the main argument that he and his coauthor Matthew Klein make in the book is essentially that rising inequality within a country, whether that country is China or the United States, heightens trade conflicts between them.
Demetri Kofinas:	00:01:41	The entire conversation lasts approximately two hours, and we devote the first hour to understanding how balance of payments and capital flows themselves, heavily dependent on the dynamics of wealth and income distribution, within a country's borders drive, not only trade imbalances, but also things like asset prices, interest rates, debt levels, currency valuations and can often lead to enormous misallocations of capital, both for the surplus country but also for the country that is on the receiving end of that capital.
Demetri Kofinas:	00:02:21	The second hour is devoted to applying this framework to specific economies, namely the United States, the Eurozone, and China. As regular listeners know I'm extremely interested in—and this is something that we discuss in detail in the second hour—how the financial instability that has manifested as a result of the types of imbalances that we discussed today is seeping into our systems of government, and that what manifested in 2008 as a financial crisis is increasingly becoming a political one and potentially a geopolitical one. And this is something we also discuss in great detail in the overtime.
Demetri Kofinas:	00:03:01	For super nerds and autodidacts, you will definitely want to consult your rundowns and transcripts for this episode. There are links in the rundown to many of the concepts and theories we discuss in the episode, as well as charts and images that are relevant to the discussion.
Demetri Kofinas:	00:03:16	I loved this episode, so let's get right into it. Here is my conversation with this week's guest, Michael Pettis.
Demetri Kofinas:	00:03:28	Michael Pettis, welcome to Hidden Forces.
Michael Pettis:	00:03:31	Thanks very much.
Demetri Kofinas:	00:03:33	It's great having you on. How are you doing?

Michael Pettis:	00:03:35	Pretty good. We're coming out of the, I think, out of the tail end of 13, 14 weeks of lockdown. So, there's been a huge change in the mood within Beijing from doom and gloom four or five weeks ago into a lot more optimism now.
Demetri Kofinas:	00:03:51	So, when did the lockdowns end in Beijing? Like, three weeks ago? Or two weeks ago?
Michael Pettis:	00:03:56	Well, technically it hasn't really ended. So, for example, if you want to visit me, you still have to go through security and show your ID. If you want to go to any of the shopping malls, you still have to, again, show your ID and get your temperature tested and things like that, but it's reached the point where people are treating it in a very perfunctory way. You get waved through all the time. Lots of people are going out. They're taking their kids out, which is a pretty strong sign that they feel very, very secure. So, while we're still technically in lockdown in effect, we're really not.
Demetri Kofinas:	00:04:31	What was the ... You said doom and gloom. What was the mood like? How dramatically did the mood in Beijing change with this?
Michael Pettis:	00:04:40	Well, it's interesting because, as I speak to friends in the US and in Europe and read comments from people in the US and Europe, it seems to me that you guys are very much going through what we went through in the first month or two in the sense that there was a time when almost anyone you spoke to could recite, with perfect accuracy, the number of deaths in every province. There was just this real, real fear, real worry, a real almost apocalyptical sense. And at the time, I think there was deep, deep pessimism about the future, but that changed really quickly. And it's one of the things that I tell my friends in the US and Europe. Right now, people are extremely worried about the future. In a few weeks, I think people will lighten up a bit. Not that there isn't a problem, the economic consequences are going to be terrible, but I think a lot of the apocalyptical vision is going to end.
Demetri Kofinas:	00:05:36	I think we also had the benefit of having seen China go through this months ahead of time. So, we had some idea of what to expect. I imagine the fact that you guys were on the frontier of it probably made the experience perhaps more frightening but certainly different. And I'd love to get into that more perhaps in the overtime, but I want to take this opportunity now to really shift to your book, which I've mentioned in our intro, Trade Wars are Class Wars; you coauthored it with Matthew Klein. It publishes the day after this episode comes out.
Demetri Kofinas:	00:06:07	You and I are recording this on Saturday, May 16th. And I also appreciate you staying up late for this. It's morning here in New York, and it's nighttime-
Michael Pettis:	00:06:16	No problem.
Demetri Kofinas:	00:06:16	... over in Beijing. So, for those who haven't read the book, and I have read it, and I'm excited to go through it, but how do you describe what it is? What is this book about?
Michael Pettis:	00:06:26	Well, our basic argument is that the deep imbalances, the deep current account and capital imbalances around the world are a real problem for the world and

they have to be resolved, but unfortunately, they've really been presented as conflicts between countries. And what we argue in this book is that that's a complete misunderstanding of the sources of the imbalances.

Michael Pettis:	00:06:49	The real problem is conflict between sectors, so that the same groups in the US and China or in Germany and Spain are paying the cost of these imbalances. And the same groups in all of those countries are getting the benefits of all of these imbalances. And they actually, there's a self-reinforcing process in which the global imbalances worsen income inequality, and income inequality then worsens the global imbalances. So, the real point of our book is that, if we want to understand the way these imbalances are occurring, and if we want to understand the income inequality implications, we really have to understand the sources of the imbalance in excess savings.
Demetri Kofinas:	00:07:33	So, there've been many comparisons made between this period and the 1920s in terms of the growth of wealth inequality in the United States. How accurate are those comparisons? Have we seen a period like this before?
Michael Pettis:	00:07:48	Yeah, we've seen it several times. We saw it in the 1890s and the 1920s, probably something quite similar in the 1830s, although under slightly different circumstances, but the 1820s are a very good comparison because, at that time, you had, in the United States, soaring income inequality, which led to massive increases in the American savings rates. And so, the US at the time, even though it was investing quite a lot, was saving even more, not because of household thrift or anything like this.
Michael Pettis:	00:08:21	The point that Matt and I make in our book is that high savings rate have nothing to do with cultural variables. High savings rate really have to do with income distribution. And in the 1920s, the way income was distributed, where the wealthy had an extremely high share of income equivalent to what they do today, the result was extremely high savings rates and the need to export those excess savings to Europe. And so, we ended up with many of the same problems, rising income inequality in Europe, as well as in the US, setting off these tremendous balances. And the point is they can't persist. At some point they must reverse. And of course, there are a bunch of different ways that they can reverse.
Demetri Kofinas:	00:09:01	So, this is the part that I think is counterintuitive to most people. What determines the savings rate for any particular country?
Michael Pettis:	00:09:09	That's, I think, one of the most widely misunderstood aspects of microeconomics, of the balance of payments. There are several groups in any economy that have different savings and consumptions rate. And typically, the easiest way to divide it up is, let's say you divide up any country, China, or any other country into ordinary households, rich households, governments, and businesses. Now each of those has a different savings and consumption function. Basically, ordinary households consume most of their income, and they save a small part of their income. Rich households, on the other hand, save most of their income, or they save a very large part of their income and consume a very small share of it.

Michael Pettis:	00:09:54	Businesses don't consume at all. Technically, all business profits are savings, and then government save most of their income. They will consume a little bit on behalf of households, but basically, governments save their income. And remember, saving simply means not consuming. If you earn $100, and you consume 80 of it, then by definition, you're saving 20 of it. So, the reason certain countries have very high savings rates, and other countries have low savings rate is not because of the former countries are thrifty, hardworking people, and the latter or are spendthrift and the whole grasshopper and ant metaphor.
Michael Pettis:	00:10:34	The reason is really quite different. If you take income from ordinary households, if you take $100 of income from ordinary households and transfer it to the rich or transfer it to the businesses in the form of greater business profits or transfer it to governments in the form of taxes, in every case, consumption will go down, and savings will go up. So, high savings countries are simply countries in which ordinary households have a relatively low share of total income. And that's what forces up the savings rate. It has nothing to do with cultural variables or anything like that.
Demetri Kofinas:	00:11:12	In other words, that wealthier people or corporations are marginal consumers of assets as opposed to the larger middle class population, which if it gets a marginal increase in its income, it's going to use that on goods and services.
Michael Pettis:	00:11:27	Exactly right. So, as you shift income back and forth between different groups, the consumption rates and the savings rates will automatically go up and down as a function of the shift in income. The clearest example of that, Dimitri, was probably Germany in 2003, 2004. Before that period, Germany was running current account deficits. By definition, that meant that German savings were less than German investment. And then in 2003, 2004, they implemented a series of labor reforms, which is really just a euphemism for lowering the growth rate of wages. The growth rate of wages dropped by two thirds after the reforms; meanwhile, business profits soared. They rose by more than 50%.
Michael Pettis:	00:12:15	So, a very simple way of looking at the labor reform is that you basically transferred income from German workers to German businesses. And if you look at the total national accounts, you'll see the household share of GDP went down, and the business share of GDP went up. As the household share of GDP went down, so did the consumption share. And of course, GDP is consumption plus savings. So, as the consumption share went down, by definition, the saving share went up. And it went up so rapidly ... And here's the thing, many people will tell you, "But that's a good thing, as savings go up, investment goes up."
Michael Pettis:	00:12:53	No, that's not true. That depends on whether you're a developed economy in which investment is constrained by the lack of savings or an advanced economy, in which there are no savings constraints; interest rates are very low. Capital is freely available. So, increasing the savings rate didn't increase investment. In fact, weirdly enough, investment in Germany actually declined as a share of GDP. So, you went from a position in which investment exceeded savings, that's the current account deficit position, to one in which savings massively exceeded investment; that's a current account surplus position. So, the reason Germany is running the largest current account surpluses in the world, is not because after 2003, the Germans suddenly became thrifty, it's because the 2003, 2004 labor

reforms basically screwed German workers to the benefit of German businesses. Profits soared.

Michael Pettis: 00:13:53 When you look at the other side of that, the same accounting identities holds. So, Germany basically exported this excess savings because they were saving more than they invested to, what we call, peripheral Europe. Let's call it Spain. So, now Spain is importing German savings, not because it wants to, not because it needs it, but simply because, given the structure of the Euro, there's no way they can prevent massive German inflows, something like 20 to 30% of GDP in just a few years. And Spain also has to adjust, that is with all of these foreign savings coming in and without Spanish ability to manage its currency, investment in Spain had to rise above savings. Now, if investment went up, that would have been a good thing, but investment didn't really go up. There was some increase in investment, mostly in speculative real estate, but if investment doesn't go up, then savings must go down.

Michael Pettis: 00:14:54 And there are basically three ways savings can go down. One way is an increase in unemployment. So, in other words, as Germany began running trade surpluses with Spain, Spanish companies who were no longer able to compete with the German companies would have to lay off workers. Now, obviously Spain didn't want that. So, there were the alternative ways of dealing with it. As money flooded into Spain, the Spanish bank significantly lowered their lending standards.

Michael Pettis: 00:15:23 And we saw an explosion in household debt. So, household consumption went up, which is another way of saying that savings went down. The third way, which Spain didn't do, was with a massive increase in the fiscal deficit, but that's another way you adjust. The point is that, because of all of these excess German savings flowing into Spain, Spain basically had to choose between more unemployment or more debt. And at first, as we all know, it chose more debt, until around 2008 when its ability to continue increasing debt was constrained, and we immediately saw unemployment sore to 25%.

Michael Pettis: 00:16:04 So, if you'll notice what really happened is that German workers had their wage growth lowered, and that put pressure on Spanish workers. Ultimately, it resulted in unemployment in Spain. To think of that whole thing as a fight between Germans and Spanish, I think, is incorrect. It really was workers in both countries that ended up paying the cost of the so-called labor reforms in Germany.

Demetri Kofinas: 00:16:31 So, in other words, the higher savings rates in Germany created a buildup of pressure in the form of capital that we could see in the lower interest rates that convergence of bond yields across the Eurozone in Spain, for example, which ultimately led to a misallocation of capital. Now, I think another thing that's interesting is, and I want to really highlight this point, when you talk about investment, I think we have a sort of basic idea that investment is good. Savings and investment are good. Consumption is bad. But as we've seen in other cases, investment can also be bad. Capital investment can also be misallocated.

Demetri Kofinas: 00:17:11 So, I think it would help if we explored some examples of economies. You mentioned Germany. China is another example of a country that has deployed a high growth model, but there also has to be, as you said, a need for that investment internally. Otherwise you get internal misallocations, or the capital goes abroad in search of a positive return. Maybe we could actually start with an example of where this model has been deployed effectively, meaning that it led both to sustainable economic growth through capital investment and to an eventual transition to a consumer led growth model.

Michael Pettis: 00:17:47 Well, for most of history, investment has been constrained by insufficient savings. In fact, one explanation of why the industrial revolution occurred in England is because England was the first place where we saw massive accumulation of moveable savings in the form of gold and silver. That's really effected the way economists think about savings. We always think that increasing savings is a good thing because it boosts investment, but I think conditions have changed quite dramatically. I would say that we live in a world in which there are two very different attitudes towards investment or two very different types of investment paradigms, I guess.

Michael Pettis: 00:18:28 In one case, and this is mostly developing countries, the amount of desired investment far exceeds the actual investment. China in the 1980s was terribly under invested. It had four commercial airports. It had no highways. It had no subways. It had a terrible train system. It had very few bridges, et cetera, et cetera. China at that time had almost infinite investment needs. The model that China developed, which is not a model. Many, many other countries will follow this model. I call it the Gerschenkron Model because Alexander Gerschenkron was the first one really to write about it. What Gerschenkron argued is that developing countries have two big problems. One problem is that they have high investment needs and insufficient domestic savings. The solution is to raise the savings rate because if you don't, then you depend on foreign savings and foreign savings can be very risky.

Michael Pettis: 00:19:26 It's not necessarily a bad thing. The United States in the 19th century grew in large part because of British and Dutch savings that poured into the US. The US ran current account deficits nearly every year of the 19th century. But because foreign savings are very, very risky, the argument is you have to push up the domestic savings rate, and the way you do that is very straightforward. Take money away from those sectors of society that are more likely to consume rather than save. Take money away from ordinary people.

Demetri Kofinas: 00:19:58 By risky, you mean that there could be capital flight, or for some reason, the capital could stop coming in. That you're depending on foreign savings.

Michael Pettis: 00:20:06 Yeah. Foreign savings tend to come in waves. So, it's really interesting, but you can identify crises in the American financial system with expansion and contraction of the British banking system. So, you become very, very dependent on what happens in the financial sector in the central country, the country providing the capital. So, it's not necessarily a bad thing, but if you can develop your own domestic savings, it's much more secure. The way to do that is to take money away from consuming entities and pass it on to non-consuming entities. If you do it right, and China did it right at the time, you end up raising the savings rate, raising huge amounts of savings, pouring them into the banking system.

Michael Pettis: 00:20:49 The second point that Gerschenkron made is that developing countries have a bad track record of investing in productive infrastructure. So, his recommendation was you have to centralize the investment process. Again, that's exactly what happened in China and in at least two dozen other countries, since the second World War. Now, this is a really great program, as long as you are significantly under invested. So, you force up the savings rate, pour the savings into the banking system, and then some central authority, local and central governments force all of these savings into infrastructure. It doesn't really matter how sophisticated you are in choosing investment projects, because basically China needed everything. So, whatever you built was going to be productive. That generated such rapid growth that even though households were effectively getting screwed, they were still benefiting tremendously. You can look at it, you can see-

Demetri Kofinas: 00:21:49 The sort of idea that a rising tide lifts all boats.

Michael Pettis: 00:21:51 Exactly. That's when trickle-down theory actually works. While China's GDP was growing at 10% and while rich people in China were growing at 12% or 13% or 14%, ordinary Chinese households were growing at 6% or 7%, which is great. That works fine. The problem is once you've reached the maximum level of investment that you can absorb, in other words, when actual investment is equal to desired investment, then what drives additional investment is demand. Ultimately the demand is consumer demand. So, growth in consumption in developed economies in which desired investment isn't much greater than actual investment really depends on changes in consumption. So, if consumption growth slows, then business investment also slows. That's exactly what happened in Germany. As German consumption went down as a share of GDP, German investment also went down, even as German savings went up. And that's the problem.

Demetri Kofinas: 00:22:58 It makes sense if you're a country at the very bottom of the development ladder that you have a dearth of investment and there are investment opportunities, but how do you know when you've gone from having healthy imbalances, like the kind you've just described now, to having unhealthy imbalances? Like I imagine is the case today with Germany and China.

Michael Pettis: 00:23:21 Yeah. There is no point at which you know. In theory, when the marginal return on investment drops to zero, then you have enough investment. The problem is that in China, we don't write down bad investment. We overstate the returns on investment, and we overstate productivity growth. But I think as a rule of thumb, China has had the highest investment rate in history and the highest investment growth rate in history, those are two different things, for the longest period in history. The highest investment share of GDP that we've ever seen before China was Korea around 40% for a few years. In China, it's been around 50% for 20 to 30 years. There's no way of knowing when do you reach your limit, but I think if you have the highest growth rate of investment in history for the longest period of time in history, then the chances that you are reaching your limit rise pretty quickly. I would argue that we probably reached that limit 10 to 20 years ago.

Demetri Kofinas: 00:24:28 So sometime around the turn of the century or closer to the peak of the US credit bubble around 2007, 2008?

Michael Pettis: 00:24:36 I would argue that probably at the end of the nineties or the beginning of the 2000s. Now in March 2007, then Premier Wen Jiabao gave a very important speech in which he basically acknowledged the problem. He acknowledged that China was severely unbalanced, and he promised it would be the top priority of Beijing to rebalance demand. Now it didn't work. The imbalances got worse for the next five years, which shows you how difficult it is to fix. But clearly by 2007, it was widely acknowledged by policy makers in Beijing.

Demetri Kofinas: 00:25:12 What is the situation right now in China's economy? We've covered this a number of times on the show. We've had folks like Dinny McMahon, Anne Stevenson-Yang, David Webb, Ho-fung Hung, and others. We've seen reports of all these ghost cities. Is there any way to gauge the extent of malinvestment in the Chinese economy?

Michael Pettis: 00:25:33 It's really tough because if you build the bridge, is it productive or not? Well, it might not be productive today, but you could argue that if growth continues at 8% or 9% a year in five or six or seven years, it will be productive. The problem with those arguments is that they're highly self-reinforcing. Because if growth slows, then the bridge is even less productive and that puts even more downward pressure on growth. So, it's really hard to say, but one of the ways you can think about it is that when investment is productive, debt rises but the debt burden shouldn't rise. If I borrow $100 and invested in a project that increases the value of the economy by $110, then even though my debt has risen, my debt burden has actually fallen.

Michael Pettis: 00:26:25 When you start to see debt rise very rapidly relative to GDP, relative to the real GDP, which we don't know what it is in China, but in China, it's even rising faster than nominal GDP. So clearly there is a problem. If you are investing productively, there is no way debt should rise faster than GDP. The fact that it's rising faster than GDP is proof that it's not productively invested.

Demetri Kofinas: 00:26:53 Are low interest rates also a sign of that?

Michael Pettis: 00:26:56 Yeah. Typically, when countries have had excess savings, they've also had very low interest rates. The thing is in China, low interest rates were also part of the problem, particularly in the last decade. You may remember that at the end of the 1990s, there were huge concerns about the Chinese banking system. The banks were basically bankrupt. In the first decade of the century, they went through a massive cleaning up of the banks. Now, many people will tell you that China grew out of its debt problem, and that's nonsense. What happened was that nominal GDP growth at the time was very high, 16 to 20%. The GDP deflator, which is a measure of economy-wide inflation was around 8% to 10% every one of those years. What should have been the right interest rate in China? We can argue, but somewhere between probably 10% and 15% would have been the right interest rate.

Michael Pettis: 00:27:51 In fact, during that period, the lending rate was around 6% to 7% and the deposit rate was around 2% to 3%. So, under those circumstances, if I owe you a lot of money and I am able to restructure my debt at 6% or 7% interest rate, then even if I do nothing, my wealth is going to grow at least by inflation and on average, by the growth rate of nominal GDP. After 10 years, basically my debt has disappeared. A little bit like what happened to Germany after World War I, hyperinflation wiped out the debt. In this case, negative real interest rates wiped out the debt in exactly the same way.

Michael Pettis: 00:28:34 But the mistake is to assume that therefore the debt problem was miraculously resolved. It wasn't. What happened is that the cost of the debt was allocated to household's savers because while inflation in China was 8% to 10%, they were receiving 2% to 3% on their deposits. This was like a huge hidden tax on savings. The proceeds of which were used to bail out the borrowers. In that case, very, very low interest rates, artificially low interest rates, actually made the problem worse because as households were forced to bail out the borrowers, their share of GDP, which was already extremely low, almost collapsed in that 10 year period. That's where we saw levels of the household share of GDP reach low levels never before seen in history. A lot of these things are self-reinforcing. That's part of what makes it so difficult to get out of.

Demetri Kofinas: 00:29:32 How does this manifest in countries that are importers of that capital like the United States? We haven't seen a lot of consumer price inflation. We could argue about how accurately CPI measures actual inflation of everyday living, but it certainly doesn't capture asset price inflation. How does that manifest on this side of the Pacific?

Michael Pettis: 00:29:56 Okay. Let's say there are only two countries, China and the United States, and they have balanced trade, balanced capital flows. And then China imposes some kind of hidden or explicit tax on the household sector that takes away a portion of their income and so forces up the savings rate. It transfers income from ordinary households either to the rich or to businesses or to the government. That forces up the Chinese savings rate by $100 assume that there has been no change in investment. What do the Chinese do with $100? Either they must export it, or they must eliminate it. If they don't export it, the way they eliminate it is by basically closing down factories that are not able to sell things to the domestic Chinese and unemployment goes up. That brings the savings rate back down into balance. That's the bad way of doing it.

Michael Pettis: 00:30:48 The easier way of doing it is exporting those savings, the US because it has deep, well-governed, very flexible financial markets, basically that's where the world exports its excess savings. Roughly half of all of the excess savings in the world end up in the US. By the way, not coincidentally. Most of the rest ends up in the UK, Canada or Australia, countries with very similar financial markets, very well governed, deep financial markets like that of the US. But okay, in this case, China exports $100 to the US. The US is now importing. It's running a capital account surplus of $100. So, it must run a current account deficit of $100 to match the Chinese surplus.

Michael Pettis: 00:31:35 Now, there are basically two ways the US could be running a deficit. One way is if the $100 that came in from China caused American investment to go up by $100. In that case, investment would go up by $100, American savings would stay the same. So, investment exceeds savings by $100, and that would explain the US current account deficit.

Michael Pettis: 00:32:01 If you invest more than you save, you must import the balance from abroad. But in the 19th century, that's what would have happened. British money that came into the US caused American investment to go up because desired investment levels in the US far exceeded actual investment levels. It was a rapidly growing, developing country-

Demetri Kofinas: 00:32:22 And the economy was also investment driven in the US during that period. The railroads, the

Michael Pettis: 00:32:28 Exactly. As a developing country, it has to be an investment driven. Yeah. But today things are different. Today we don't have the savings constraint. Capital is so freely available that basically anybody who's credit worthy can borrow money. Interest rates are at the lowest we've ever seen in history. Until COVID-19 American companies were sitting on huge piles of cash and they didn't know what to do with it. They weren't investing it. They were engaged in stock buybacks or whatever, but they weren't investing it in productive capacity.

Michael Pettis: 00:32:59 So if you give them an extra $100 they're not going to invest it. They already have as much investment as they want. But if investment doesn't go up, savings must go down. And this is the part that way too many economists have trouble understanding, how is it possible that high savings in China forces down the savings rate in the US.

Michael Pettis: 00:33:21 Well, there are many ways it can do so. One way it can do so as it could force the value of the dollar to rise. And when the dollar goes up, basically that's a wealth transfer from exporters who are manufacturing companies to importers who are households. So, remember I said, if you transfer money from households to businesses, the savings rate goes up. If you transfer money from businesses to households, the savings rate goes down. So that's one way the US could have adjusted with a stronger currency.

Michael Pettis: 00:33:53 Another way is all of this foreign money could have poured into American stocks and bonds and real estate. And so, caused their values to soar, it's not an accident that we always see bubbles, asset bubbles when we see these big balance of payments and balances. So, asset prices soar, Americans who own stocks and real estate, or whatever, feel richer. And they go out and consume a larger part of their income. And by definition, save a smaller part. So that's another way savings could go down.

Michael Pettis: 00:34:26 A third way is because China is now running a surplus, a current account surplus with the US that means Americans are buying things from China that they used to buy from Americans. So those factories now closed down. They fire their workers, and unemployment goes up. That drives down the savings rate, right? An unemployed worker has a negative savings rate.

Michael Pettis: 00:34:50 Still another thing that could happen, and this is really what happened in Spain is that the money could pour into the banking system and the banks are under tremendous pressure to find new loans. And one of the ways you find new loans is you lower the lending standards. We saw that in the US too, with the NINJA loan, basically anybody who wants to can borrow money for consumption. So, in that case, consumption goes up, savings goes down. These are all various ways. The Washington could decide that it doesn't want unemployment to go up, so it could expand the fiscal deficit. The point is when you narrow them all down, there's basically three ways the US can adjust. If investment doesn't go up, then either unemployment must go up or household debt must go up, or fiscal debt must go up. Those are the only ways that the US can adjust to capital inflows from China or from anywhere else for that matter.

Demetri Kofinas: 00:35:45 Is this a way of also saying that perhaps the best policy in the late nineties and then in the two thousands was not to keep interest rates low, not to focus on consumer price inflation or producer price inflation as an indicator for whether or not interest rates were too low. And that that accommodative monetary policy led to a gross misallocation of capital that we've seen in terms of both consumer credit, but also asset prices in the US. Is that an indication of this?

Michael Pettis: 00:36:16 Yes, that's one way of looking at it, because remember, if money comes into the US and huge amounts of money was coming into the US. And if American investments don't go up, then American savings must go down. There's just no way around that. And the obvious way American savings would go down is through a rise in unemployment. In other words, because we're importing more from abroad and we're not consuming more, those imports are displacing American production and American unemployment goes up. But of course, the fed in Washington don't want to see unemployment go up. So, they lower interest rates to encourage a consumption boom, or an asset price boom, that through the wealth effect, encourages consumption. They have to do something to prevent unemployment from going up and that usually means lower interest rates.

Demetri Kofinas: 00:37:06 But why hasn't that worked? This is another conundrum, right? Which is that we have not seen lower interest rates make a material difference anymore. And also, to what degree are the lower interest rates really about making the debt serviceable, which has expanded as a result in part of the phenomenon that you're describing?

Michael Pettis: 00:37:25 Well, it's another one of these self-reinforcing processes where lower interest rates are encouraging debt expansion, which require lower interest rates. But I would say that the initial problem was really two things, and they have exactly the same impact. If foreign savings enter into the US and because they don't increase investments, then they must either increase debt, which is what happened or increase unemployment.

Michael Pettis: 00:37:54 The other big problem, which may even be a more serious is income inequality, rising income inequality. Because remember it's the same mechanism. If you take $100 from an ordinary American and give it to a rich American, the savings rate of that rich person goes up. But remember savings must equal investment. And if investment doesn't go up, in fact, it'll probably go down if consumption goes down, then savings can't go up.

Michael Pettis: 00:38:23 So that means something must happen so that the increased savings of the rich is met by reduced savings somewhere else. And once again, the three ways that can happen is through a rise in unemployment, a rise in household debt, or a rise in the fiscal deficit. So, the point is that income inequality and the US tendency to absorb excess savings from abroad have the same impact. They forced the US continuously to choose more debt or more unemployment. And of course, they always prefer to choose more debt. But as we saw in Spain, that's not sustainable. Eventually you run out of your ability to choose more debt.

Demetri Kofinas: 00:39:06 So this raises two things that I really want to explore in more depth. One is this thing about wealth inequality, because I think another place where we see this is the low returns relative to asset prices. And this also is a positive reinforcement for wealth inequality, because it becomes more and more expensive to own anything. And the return on the assets that you own gets lower and lower.

Demetri Kofinas: 00:39:27 And I think some of the debate in the US in recent years, or in the last decade or so has been disjointed in the sense. And then the other thing I want to sort of explore, and this is kind of opening a new front, and we can decide which way to begin, which is why if a lower savings rate in China and in Germany leads to higher rates of investment or current account surplus, why are we seeing the exact opposite in the United States?

Michael Pettis: 00:39:55 The US plays a very special role in the global economy. The US is the one country in the world that cannot determine its savings rate. And the reason is because it has completely open capital markets, and that's where most excess savings end up. So, remember that when you run a capital account surplus, that is when money is coming into your country, investment must exceed savings. And if you are an advanced economy, like the US it isn't investment that goes up, therefore it's savings that goes down. The US cannot control its savings rate.

Michael Pettis: 00:40:32 The US savings rate is really determined by excess savings of the rest of the world. Remember that globally by definition savings must equal investment. So, if the rest of the world's saves more, the US must save less because of the role it plays in global capital flows.

Demetri Kofinas: 00:40:52 So expound on that. What makes the US so special? Why is it that so much capitalist forced into the US? Kind of another way of also asking what is the special role of the dollar in the international system that makes the US such a hot destination for international capital?

Michael Pettis: 00:41:09 Yeah, what I would argue is that what's called the exorbitant privilege is not really an exorbitant privilege, it's an exorbitant burden. The dollar is the safest currency. The US financial markets are the most sophisticated, the best governed, the safest most liquid financial markets.

Michael Pettis: 00:41:28 So when you have excess savings, in theory, what you should do is export those excess savings to countries that need it, in other words developing countries. But that's really risky. So, people don't really want to do that. They want to keep it someplace safe. So, there are a few places like Switzerland, but they're way too small. Ultimately, if you have large amounts of savings that you want to accumulate abroad, the easiest place to do it is in the US.

Demetri Kofinas: 00:41:57 And in the US dollar.

Michael Pettis: 00:41:58 Two thirds of all international reserves are in US dollars, that makes sense. It's the easiest thing to invest in.

Demetri Kofinas: 00:42:04 So I would love to actually, again, sticking with this point about savings and not going to the wealth inequality conversation yet, which I do want to explore, because I think it's actually, at least for me, the most interesting. But maybe this is an opportunity to talk a little bit about how we got to the post Bretton Woods system and the kind of distortions that it created. Is that a fair place to start to begin to understand why we have these sorts of global imbalances in capital flows?

Michael Pettis: 00:42:32 Yes. I think, I wouldn't say it's all Bretton Woods. I would say that a lot of changes that took place intellectual changes as well as regulatory changes in the 60s and 70s were to blame. But if you look at the last 100 years of, I won't say dollar dominance, because the dollar didn't really become the dominant currency until the 1940s. But before that it was dollar and sterling.

Michael Pettis: 00:42:56 And it's really interesting what you see on the US role in the global balance of payments. During the first 50 years of this period of dollar dominance, basically, let's say from 1920 to 1970, those were really characterized by two global Wars, two world wars that destroyed an enormous amount of wealth and required an enormous amount of rebuilding. So, during that period, what the world really needed was a source of savings in order to fund domestic investment. Countries like Germany, France, Japan, et cetera, were too poor to fund domestic investment, but they needed to rebuild their entire economy. So, they had huge investment needs.

Michael Pettis: 00:43:37 And I would argue that it's not coincidental that during that entire 50 year period, the US ran current account surpluses, which is another way of saying it ran capital account deficits. The US was the world's largest exporter of savings. But by the 60s and early 70s, the world was substantially rebuilt from the two world wars. And as a result, income levels soared, and investment needs dropped dramatically. And I would argue that that's when we moved to the period of excess savings, something that was quite new in history we saw briefly-

Demetri Kofinas: 00:44:13 Globally speaking.

Michael Pettis: 00:44:13 Globally speaking, Yes. We saw it briefly before World War I. In fact, the greatest theorists of excess savings and under consumption were a British economist by the name of John Hobson and an American economist by the name of Charles Arthur Conant, who both wrote in the 1890s and the 1900s, but that was a brief period.

Michael Pettis: 00:44:33 And then that re-emerged, and I would say it's not a coincidence that countries that had a certain type of financial market, basically Anglo-Saxon financial markets well-governed completely open with no distinction between foreign and domestic capital, et cetera. They all immediately ran into deficit.

Michael Pettis: 00:44:54 That is capital account surplus, current account deficit, which completely contrary to all economic theory, persisted for decade after decade. Deficits are supposed to be self-correcting, but they weren't. They ran permanent deficits for 50 years. And I would argue there had to be a distortion that created that because the normal functioning of the market wouldn't have permitted that, and it would argue that the distortion is excess savings. And the reason we have excess saving is because in a globalized world, the way you win the fight for international competitiveness is you directly or indirectly lower your wages. So, I think it's also not a coincidence that during that period. In the 1970s was one income inequality was at its lowest point in American history. And ever since then it's been rising. And I would argue that as I said, they aren't coincidence, as all of these things we saw in the 1920s, we saw in the 1880s and 1890s. It's an old story.

Demetri Kofinas: 00:45:55 So this is also interesting because isn't this also a way of saying that when investment opportunities or ample investment opportunities are not clearly available, that what should happen is that there should be a more equitable distribution of the wealth in the economy. Is that right? There should begin to be a more equitable distribution.

Michael Pettis: 00:46:17 Absolutely. The governor of the fed under FDR is an absolutely brilliant man by the name of Marriner Eccles. And he very famously said that. He himself was a rich businessman. And he argued that the reason the Roosevelt administration was redistributing wealth was not to soak the rich. He said, it's to defend the rich. He said, you can't save in the form of factories and roads and bridges if no one is going to use them. Your savings then become worthless. So, if we take a portion of your income and give it ordinary people, their use of that income will make your savings, will make your assets valuable. As I said, it's an old lesson that we've just forgotten.

Demetri Kofinas: 00:47:01 So what's the role of fiscal policy here, because I think there's also a distinction to be made. And I want to also direct listeners to an episode we did with Bill Janeway. It might've been episode 63, but it's around there. And I really enjoyed that episode. And it was very helpful for me to read Bill's book because it highlighted the need for fiscal investments, that there are investments that only the government can make.

Demetri Kofinas: 00:47:27 And when I say only the government, I mean that the private sector is simply... The private sectors focuses on efficient investments. On taking sort of, for example, the foundational internet protocols and commercializing them, and extract from them additional value. But at the very sort of foundational place where risk is fraught and the amount of capital needed to make those types of investments is so enormous that only governments can actually do that, that only governments would be able to do that.

Demetri Kofinas: 00:47:55 So, another question I have is, putting aside whether or not consumption is depressed in the United States, in the United States. To what degree is investment depressed because the mechanisms by which we invest are commercial as opposed to fiscal? As in other words, that the government is not making sufficient investments and that's putting aside whether or not we feel like we can trust our government to make investments in this environment, because I think that's also part of the problem. There's much less trust in government today than there was during the 1940s or the 1950s or the 1960s, when government investment led to things that we celebrate, like the moon landing or the Claude Shannon's paper and information theory was published as a result of the government private-public partnership with Bell Labs. So how much of that is at play here, the lack of fiscal investment?

Michael Pettis: 00:48:51 The fiscal policy can play two really important roles. The first as you mentioned, is investment in which it's impossible for the investor to capture the externalities. So, to take a really simple case, if you were to spend a hundred

		dollars repairing the roads of Manhattan, you would increase the value of the New York economy by who knows how much, maybe $200. But there's no way a company that would undertake to repair the roads could possibly collect that $200 or even a hundred dollars. So ultimately, the government must do that. Anytime there is an investment which benefits the economy in ways that can't be captured by profits, then by definition that must be done by the government. So, a lot of infrastructure spending really has to be government spending. And the US is blessed or cursed depending on how you look at it. It's in a very different position than China because China simply cannot increase public sector investment anymore. It has way too much.
Michael Pettis:	00:49:55	The US, everybody knows we've got terrible infrastructure. There are enormous improvements that can be made that would significantly boost the value of the economy by far more than the cost of the investment. So, if we do that, we can get real growth, real solid growth with a reduction in the debt burden, not an increase. Because if you borrow a hundred dollars and spend it in a way that increases the value of the American economy by $110, then your debt burden actually goes down even as your debt goes up. The other role of fiscal policy is in, and it's always difficult to say that because for some people this is like a red flag before a bull, but in forms of income redistribution, because why do businesses invest? Businesses invest because they can produce something that people will buy.
Michael Pettis:	00:50:46	If consumers are constrained in their ability to increase consumption, then there's no point in investing. But if consumption is growing very strongly in a healthy way, not through debt, but through rises in household income, then businesses will invest more in order to serve that greater demand. So, I would argue that there's two very important fiscal roles. One is to invest in productive infrastructure, which God knows the US needs, so does Europe. And the other is to redistribute income downwards so that more spending can generate more private sector investment. Now basically, that's the point that I would make about the fiscal side.
Demetri Kofinas:	00:51:27	So for example, is an indication of the phenomenon that we're describing, is an indication of this the increase in stock buybacks we've seen in recent years and the growth in corporate cash reserves? The fact that suggesting that corporations really don't know what to do with all the cash and there aren't really adequate investment opportunities?
Michael Pettis:	00:51:46	Exactly right. They've got all of this cash and they should be investing it to increase productivity, but their concern is that if they produce more stuff, no one's going to buy it.
Demetri Kofinas:	00:51:57	So going back to the thing we described when we kind of first got into this part of the conversation which had to do with Bretton Woods, do you think that the United States could have sustained gold convertibility in 1971 without worsening the imbalances between the supply of dollars and the claims on official gold reserves at the time? Was that a viable path? I mean, what sort of adjustments could they have made to the system in order to make that possible and to make that work as opposed to simply abandoning it?

Michael Pettis:	00:52:26	Well, I'm not a big believer in the gold standard, although I will admit it does have one really important function is that it imposes monetary discipline. If we could find another way of doing that, that might be fine. But I think Barry Eichengreen made a very important argument in his book, Golden Fetters. And he said, "The problem with the gold standard system is that it's not that the gold standard eliminates crisis. We had as many crises in the 19th century under the gold standard as we have today. The problem is the adjustment mechanism for the gold standard, the adjustment mechanism for any highly disciplined form of money falls most on the working class." And he argued that in the 19th century when the working class wasn't in franchise, when they didn't really vote, it didn't matter, and we didn't fully understand the mechanism.
Michael Pettis:	00:53:15	He argued today that would cause huge populist problems. And you only have to look at American history, the big fight over silver at the end of the 19th century, to see exactly what Barry Eichengreen meant by that. The adjustment mechanism was too brutal for the vast majority of the population. So, I don't think we could have stayed on gold no matter what. In fact, I don't even really think of Bretton Woods as a gold standard. It was a gold standard as long as you promised never to use it type of standard.
Demetri Kofinas:	00:53:47	Well also for listeners, we had Dr. Eichengreen on and I believe we did discuss the free silver movement in that episode, so people should definitely check that out. But what about if we penalized excess surpluses as Keynes had suggested during the negotiations of Bretton Woods, could that have been a way of actually maintaining the benefits of the exchange rate system without generating the types of problems that we have today?
Michael Pettis:	00:54:12	Yes, probably. But what I would suggest might even be better, in the old days, trade imbalances were caused by pricing differentials. If England could make textiles more cheaply than France, then England would run a trade surplus with France, and it would run a capital account deficit because English banks would basically finance the French purchases of English textiles. In other words, finance followed trade. Most finance in those days was trade finance. Today, it's very, very different. You have massive flows of capital for investment reasons, speculative reasons, flight capital, reserve, accumulation, investment fads, all these other things. And these four significant adjustments, harmful adjustments on the underlying economies. What people forgot is that while Keynes and Harry Dexter White disagreed on a number of things, they also agreed that free trade was generally a good idea, free capital flows was a terrible idea.
Michael Pettis:	00:55:14	And most economists seem to believe this until around the 1960s when we saw a huge change in our approach to economics and we fell in love with the idea of totally free capital flows. Now, free capital flows make sense when people moving capital around the world are basically Warren Buffett, looking for the most productive use of capital. But that's no longer the case. Most capital flows are not Warren Buffett. Most capital flows are speculative flows that pour in and out of countries, flight capital, reserve accumulation, et cetera. So, they're no longer performing their function of moving capital to its most productive use. They're doing something else.
Michael Pettis:	00:55:58	Now Keynes really opposed of free capital flows because he saw how damaging it was to England in the 1920s. We often think the 1920s was a boom period. It

wasn't for England. It was terrible for England. In large part, I would argue because of massive inflows into Sterling, forced England to reverse its huge current account surplus and cause massive unemployment domestically. And Keynes said, "We can't allow this to happen again." So, what I would argue is we don't really need to fix the trading system per se. What we need to do is fix the system that allows countries to run trade surpluses by lowering domestic income by pushing wages down, and then rather than force them to absorb the impact of this deficient domestic demand, they can simply export it to the US or to England or to countries like that.

Michael Pettis: 00:56:52 So it's really a capital flow problem. I would argue that if we could fix the capital flow problem, the trade problem would automatically fix itself. If I may Demetri, but I would like to address in this light, this whole issue of offshoring. Because many people say the problem is offshoring. An American company moves to China and so Americans lose jobs. Not necessarily, that's not the way trade is supposed to work. Normally, what should happen is an American company moves to China because it's more efficient to produce there. It then produces in China, pays Chinese workers a bunch of money. Chinese workers now have to consume more. And as part of that consumption, they import more from the US and so that creates no trade imbalance. All that happens is that the US loses a less efficient business and strengthens a more efficient business.

Michael Pettis: 00:57:47 That's how it's supposed to happen. Why doesn't it happen that way? It doesn't happen that way because when the American company goes to China and pays for production in China, such a small share of that money goes to Chinese workers that the Chinese workers can no longer consume enough to import from the US to balance out the benefits of the trade. That's the problem. It's an income distribution problem. And it's an income distribution problem that's accommodated by the free flow of capital.

Demetri Kofinas: 00:58:20 So, one of the things I was thinking about when you were talking was that the first time I ever read a book that helped explain this for me was when I was in college. I majored in economics and we learned about Ricardian comparative advantage, which was one of the theoretical bedrocks of neoliberal trade policies and globalization. And the book was George Soros' The Crisis of Global Capitalism, which I think he published in... Well, no, he wouldn't have published it in '98. Maybe that's when he published it, but he was certainly talking about the '97, '98 crisis in the Asian tiger economies and he highlighted this point exactly. Which is that a lot of these trade policies have been developed without really taking into account the reality of financial flows and the destabilizing effect that they have on trade relations and on economies.

Michael Pettis: 00:59:09 That's exactly right. That's exactly right. And we used to know that.

Demetri Kofinas: 00:59:12 So, Professor Pettis, I want to move the second part of our conversation into the overtime. And I want to bring it back to China. We'll discuss the US also. I also want to talk about the European Union and the eurozone, and also discuss kind of what we may expect to see in these economies and in these political societies because I think this is also a political problem. I think one of the issues is that these financial flows have been destabilizing financially the financial markets. We've seen that. I mentioned Thailand, the same has been true in Argentina and certainly in the US. But I think that in the case of the US for example, and also eurozone economies, what was financial instability has become increasingly political instability. And the monetary authorities, in particular, have become invested in sustaining asset prices because asset prices are tied so heavily to trillions of dollars of pension funds and other sources of political stability within the country.

Demetri Kofinas: 01:00:10 So I think this is sort of a fascinating dilemma that we're in, and so many of these institutions like central banks have really had to, have seen their actions expand far beyond their mandate. So, there's a lot to discuss.

Demetri Kofinas: 01:00:23 For regular listeners, you know the drill. If you're new to the program or if you haven't subscribed yet to our Audiophile, Autodidact or Super Nerd tiers, head over to patreon.com/hiddenforces or scroll down to the summary section of this week's episode and click on the link that sends you to the Hidden Forces Patreon page where you can continue to listen to my conversation with Professor Pettis, including getting access to the transcript, rundown, and notes to today's conversation. I hope you guys will join us. Michael, stick around. We're going to move the second part of our conversation into the overtime.

Demetri Kofinas: 01:01:00 Today's episode of hidden forces was recorded in New York City. For more information about this week's episode or if you want easy access to related programming, visit our website at hiddenforces.io and subscribe to our free email list. If you want access to overtime segments, episode transcripts, and show rundowns full of links and detailed information related to each and every episode, check out our premium subscription available through the Hidden Forces website or through our Patreon page at patreon.com/hiddenforces. Today's episode was produced by me and edited by Stylianos Nicolaou. For more episodes, you can check out our website at hiddenforces.io. Join the conversation at Facebook, Twitter, and Instagram at hiddenforcespod, or send me an email at dk@hiddenforces.io As always, thanks for listening. We'll see you next week.