



## Lessons Learned Oral History Project Interview

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### Introduction:

The Yale Program on Financial Stability (YPFS) contacted David Wilcox by email to request an interview regarding his time informing the Federal Reserve Board of Governors as deputy director of research and statistics.<sup>2</sup> In that role, he assisted in developing the Federal Reserve's policy response that ultimately stabilized the economy during the global financial crisis by providing insight into the economic and financial outlook to the Federal Open Market Committee (FOMC) prior to each of its policy-setting meetings.

Wilcox became director of the division in 2011 through 2018, acting as the division's chief economist and manager and a senior advisor to three Fed chairs (Bernanke, Yellen, and Powell). After leaving the Fed, he joined the Peterson Institute for International Economics as Nonresident Senior Fellow. His research focuses on the US macroeconomy, monetary policy, and diversity and inclusion in the economics profession.

*This transcript of a telephone interview has been edited for accuracy and clarity.*

### Transcript:

**YPFS:** Now that we're recording, if there's any disclaimer you want to make, this would be a good time.

**Wilcox:** Well, no, I don't think so. Of course, I'm no longer employed by the Federal Reserve so I cannot represent the official views of that institution. I'm speaking purely in a personal capacity.

**YPFS:** Right. Since this is an oral history, why don't we start with a little narrative? What were you working on, back in 2006 and '07? From your vantage point, when did you first see the signs of this housing bubble that

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<sup>1</sup> The opinions expressed during this interview are those of Mr. Wilcox, and not those any of the institutions for which the interview subject is affiliated.

<sup>2</sup> A stylized summary of the key observations and insights gleaned from this interview with Mr. Alvarez is available in the Yale Program on Financial Stability's *Journal of Financial Crises*.

**was forming, and the potential damage to the economy that would follow?**

Wilcox: At that time I was serving as Deputy Director in the domestic economics division at the Federal Reserve, which is called the Division of Research and Statistics. I was then, and remain today, a specialist in the so called real side of the economy. Focusing, therefore, much more on aspects of the economy like unemployment, the labor market more generally, GDP, inflation--the main macro inputs into helping the Federal Open Market Committee set its monetary policy stance. At that time, I was mainly focused on the economic outlook.

Through that period, we were in the midst of what we thought could fairly be labeled, "the great moderation," which was a period of maybe a little more than a decade and a half or so of relative tranquility in the macro economy. Inflation seemed to be under good control, there had been a quite mild recession around the turn of the millennium. For the most part, monetary policy seemed to be, frankly, rather routine. It had been essentially codified, in terms of what the right approaches were (I use the term "right" in air quotes) by scholars like Mike Woodford.

The first sign of a housing bubble, in my recollection, was provided by work that was done by my colleague, Josh Gallin, in about 2004 or 2005. What Josh did was to create a simple, but useful, metric for assessing the level of house prices relative to rents. What he showed was that even at that relatively early stage, there were some emerging, tentative, ambiguous evidence that housing prices were moving above their normal relationship with rents. It was early enough that the evidence was not unequivocal.

It never is unequivocal with regard to assessing a financial asset bubble. Economists, particularly at that time, were trained to carefully list all the caveats and reasons why it might be rational for housing prices to move up that much. Nonetheless, Josh had the courage and the insight to venture that first emerging evidence. His research, by the way, was eventually published, as best as I can tell in 2006, in a journal called *Real Estate Economics*. As I said, that evidence was not unequivocal but I think it was an early piece of research that put the issue on the radar screen.

**YPFS: What were some of the signs the financial system itself was starting to experience stress on account of these housing market issues?**

Wilcox: I'm hampered in my effort by two factors that are worth noting. One is: These events took place more than a decade ago. Secondly, as I mentioned, I was focused mainly on the so called real side of the economy, not on the financial side of the economy.

My recollection is that in early 2007 there were some generalized concerns about the extent of leverage in the financial sector and the people who specialize in analyzing the financial sector harbored some concerns in that regard. Again, it was a generalized concern and it was very difficult even for the specialists to break the glass, so to speak, that this was an emergency situation or that we were on the cusp of something that would prove to be really world shaking.

There were some concerns as well, as I recall, about the prevalence of the use of mortgage loans that required either little documentation or no documentation of income and other qualifications of the borrowers. These went under the nicknames of No-Doc loans and Low-doc loans. At the same time, there were also claims that those loans were an efficient way of minimizing transaction costs, especially for high-income individuals. At least in some cases, the representation was made that these loans represented an efficient market evolution to serve such customers with lower burden.

**YPFS: So how does that thinking evolve then through the crisis period? When did it become clear that this wasn't an average economic cycle, that you were facing something more significant and that more significant measures were going to have to be taken to face it?**

Wilcox: The level of concern went up considerably with the collapse of Bears Stearns. No question about it. Yet through the course of 2008--between March of that year and the collapse of Lehman later on, in September-- there was, in my recollection, something like an eerie calm. Of course, we know in retrospect that was the calm, not before the storm, but the calm before the hurricane.

The full scope of the debacle that was about to unfold really became apparent, in my awareness anyway, only with the collapse of Lehman Brothers and then the cascade of other disastrous events that followed in rapid order. It was only apparent really at that time that really extraordinary measures would have to be taken. That was reflected, for example, in the rapid move of the (Federal) Open Market Committee to cut the funds rate through the course of the fall of 2008, eventually by December reaching the effective lower bound. They set a target range of zero to a quarter percentage point, I believe if memory serves, at the December meeting.

That was a very large and rapid easing in the stance of monetary policy. Then ensued the beginning of large-scale asset purchases, or what's come to be known by the name of Quantitative Easing. I would say the level of apprehension went up in March, but really the brutal clarity of how bad things were going to be did not become apparent until September of 2008.

**YPFS: You were advising the Fed governors as the Bear situation evolved. What was the rationale, to help Bear and how did that change by the time**

**September came along, and the sale to Lehman did not happen? What was the rationale to help one versus the other?**

Wilcox: I really was not privy to those discussions, so I don't think I can be informative about why assistance was provided in one case and not in the other. I know that's a very complicated topic. Since I really did not have a role in those discussions, I think it's best that I not venture into that. You can get a much more informed opinion from several other people, I'm sure.

**YPFS: Let's move on then to September, once we see Lehman, and AIG reach these critical stages, and the stock market crashes. Did the focus shift at that point to the emergency in the financial systems and onto the effect on the greater economy? Had views already started shifting by the time that Bear went into crisis mode?**

Wilcox: I guess would I put it a little differently. I think a good way to characterize it is that there was a roster of emergency situations. I don't think it's accurate to say that the focus shifted from the financial system to the larger economy. It seems to me that a more accurate way to describe it would be to say that the larger economy was added to the list of emergency concerns. Particularly through the fall of 2008, with the collapse of Lehman Brothers, with the seizing up of the financial system, with the placement of Fannie (Mae) and Freddie (Mac) into receivership. The potential of the financial system to destabilize the real economy very quickly became apparent. That was, after all, why the Open Market Committee adjusted the funds rate down so quickly.

Then of course very rapidly the tangible economic evidence, the actual measurements of the collapse in the economy, became available as well. One predominant impression was that policy makers didn't have the luxury, if I can put it that way, or didn't have the convenience of setting aside their concerns about financial institutions or the stability of the financial system and taking up predominant focus on the real economy. They simply had to deal with both.

**YPFS: In an interview when you retired from the Fed, you said that government agencies came together during that crisis like they had never done before or since. Some of our other interviews have also touched on the difficulty of having good oversight and good regulation leading to the crisis because there were so many different agencies involved like Fed, the Fannie, Freddie, FDIC, the Treasury. Is that an issue that you think should be addressed before the next crisis?**

Wilcox: Well, again I'd underscore that I'm not an expert in this area. I wasn't at the time, and haven't become one in the time since. My sense is that it's a mixed picture.

What was very clear to me then and remains clear now is that in the crucible of the moment there was a willingness to coordinate and to cooperate across

agencies. There was a spirit of innovation and a recognition that the way that things had been done in traditional or normal times, simply wasn't adequate to the situation. So on an ad hoc and flexible and, sure, somewhat clunky basis, there was suddenly an enormous amount of information-sharing across agencies at all levels, up and down the line, from agency heads down to our relatively junior members of the staff.

It was, as I said, to some degree clunky. There were sometimes barriers, as I recall, or impediments to efficient information-sharing. I think there was a very clear recognition of the seriousness of the situation, a sense we were all on the same team. The predicament absolutely demanded that cooperation and communication was the order of the day.

That didn't mean that there weren't difficult discussions from time to time, to work out exactly who held what authority. Who would have the lead on some particular action? Those things got worked through.

My impression, again speaking strictly as a non-expert, is that the Dodd-Frank Act addressed some of the issues in an imperfect and incomplete way. I believe in fact it extended the Fed's supervisory authority by giving it umbrella supervisory authority over Systemically Important Institutions. I'm afraid I'm going to need to refer you to other experts for a more refined assessment of what the situation was then, how it changed according to the Dodd-Frank Act and where that set of issues stands today.

**YPFS: The Fed had some authority to make regulations regarding subprime mortgages and predatory lending ahead of this housing bubble. It chose not to do that. Can you speak a little bit to what the reasoning might have been at the time and how that may have changed as the crisis evolved?**

Wilcox: I really can't. I had the general impression similar to what you just characterized, that there had historically been a reluctance to exercise much authority in that area. I think I really would need to refer you to people who focused in that area.

**YPFS: The crisis also broke in the home stretch of a presidential election, when you were going through the transition between two administrations. How did the transition, from Bush to Obama and from the Paulson Treasury to the Geithner Treasury, change the approach to the crisis and how all the different entities communicated among themselves?**

Wilcox: It's interesting; the predominant recollection that I have through that period really is one of continuity. I think there are a couple of reasons for that. One is, first of all importantly, I had only a limited perspective on the situation from my perch at the Federal Reserve. The Federal Reserve itself was a key point of continuity in the situation. Chairman Bernanke had been, obviously, a key player in helping to address the unfolding financial crisis through 2008

including into the fall of 2008 when the world really fell apart. Obviously the entire institutional structure of the Federal Reserve remained in place exactly as it had been and was unaffected by the outcome of the presidential election. That was one key point of continuity.

Another key point of continuity was that Tim Geithner shifted from one critically important role, namely as president of the Federal Reserve Bank of New York, to another critically important role, namely as Treasury Secretary. Of course that meant that he had to put a different institutional hat on. He had a different set of responsibilities. It did mean, though, that one key decision maker remained a constant in the situation, even though he was occupying a different chair at the table. He remained at the table and provided a voice of continuity through that situation.

A third point of continuity is that some key personnel from the Bush administration were asked to stay on the scene. For example, Neel Kashkari, obviously had been a key lieutenant of Secretary Paulson's through the period, up until January 20th, 2009. Neel remained at Treasury. I think he might have had the title of something like Advisor to the Secretary or something like that, but was present and able to lend his expertise. The continuity in terms of personnel from the Paulson team to the Geithner team at Treasury was important.

I'd say lastly, there was simply just, I think, a remarkable sense of teamwork and cooperation during the handoff from the Paulson Treasury to the Geithner Treasury. More generally from the end of the Bush administration to the start of the Obama administration. I of course only saw a very small slice of this. The piece that I saw operated as I think any sensible person would want, with complete openness, information sharing. No sense of holding important information back, but equipping the incoming team with the information that they would need in order to deal with the situation as effectively as possible.

**YPFS:** **One of the public perceptions lingering from this crisis is that the government bailed out the bankers, but not home owners. Then we had the rise of movements like Occupy Wall Street, and some of what we're seeing now in response to the pandemic, with the calls to cancel foreclosures and cancel debt. Why is it so difficult to fashion relief for home owners?**

**Wilcox:** There's a variety of issues that complicate matters. One is that there was, I think, some genuine apprehension at that time about cushioning individuals from bad decision-making. A constant part of the policy-making discussion was about precedent-setting with respect to future situations. Under what circumstances would the government provide assistance to an individual who had made a bad decision? A recognition there was at best an extremely imperfect ability of the government to separate the situation of an individual

who was making extraordinary sacrifices to make their mortgage payments in a timely manner, or to make the rental payments on their apartments in a timely manner, from the situation of an individual who simply wasn't making the effort.

I think there was a very clear recognition that millions of individuals were under tremendous economic pain, but there was also, from my perspective at the Federal Reserve, a recognition that these were decisions for the executive branch and the Congress to make, not the central bank. What these people needed--and there's some commonality, by the way, with the current COVID situation--in innumerable cases was not a loan, because these individuals really were not suffering from a liquidity problem. What they were suffering from was, they were broke. They simply didn't have the financial resources to meet their obligations in a timely manner. In many millions of cases, they were unemployed.

What would have been needed to address that was a massive commitment of public resources. That can only come from the Congress and the executive branch working together to create legislation to provide those resources. That can't come from a central bank that doesn't have the statutory authority to do that. My sense looking in from the outside was, there was some reluctance to provide that on a massive scale. What I think is impossible to say today is whether the individuals who were making those decisions then would make the same ones now, knowing what they do today.

There was also a sense of scale and impact. Absolutely nobody relished the prospect of providing assistance in any form to a large-scale financial institution. In no case was it ever the goal to rescue any institution because there was any fondness for the institution. There was a determination to do what was required, no matter how distasteful it was, in order to prevent the complete systemic collapse of the financial system. There was a conviction, in my view well founded, that a complete systemic collapse of the financial economy would have had even more devastating consequences for the economic lives of everyday Americans.

Those decisions were nauseating, disgusting, but taken--as best as I could tell as largely an outsider to that process--with the conviction that, however horrible those rescue efforts were, they were better than the alternative, which would have been to let those institutions fail and wreak even more widespread damage on the real economy.

**YPFS: A lot of this resonates with what's going on with the COVID pandemic. Back then it was a few gaps in terms of financial regulation and crisis tools with respect to shadow banking and that whole aspect of the financial system. Now we're noticing gaps in tools to support businesses and individuals in the real economy, for example the PPP program. From**

**your observation perch, do you see any actions that can be taken to make the policy makers more aware of these gaps in policy and the will to address them?**

Wilcox: I spent my career at the central bank, so I'm going to start from the perspective of the central bank. I think a very key observation to begin with is that a central bank has only a limited set of tools that it can exercise. As catastrophic as these situations are, it seems to me that it's critically important for a central bank, for the Federal Reserve in particular, to respect the statutory authorities and the limits to its actions that have been set by the Congress.

The Fed is a high functioning, effective organization. Simply because it's a high functioning, effective organization doesn't mean it's the right tool for addressing every situation. I think what we're learning here through two crises that have come only about a dozen years apart is that there needs to be a development of much more institutional capacity (for dealing with various aspects of financial support) that's clearly under the umbrella of fiscal policy.

We need a much more effective set of tools from Congress and the executive branch to reach individuals, to reach small businesses in ways that address, as I was describing earlier, situations of acute need where the issue is not one of liquidity. In other words, where the situation won't be made better by extending an individual or small business a loan, but where a grant of some form, the gift of public resources, is what's required. Those are policy actions that need to be taken by the executive branch and the Congress, the elected representatives of the people. There's a good reason why those actions are outside the decision-making realm of a central bank. I think there needs to be much more institutional capacity-building there to provide that kind of assistance and a much more thorough effort to think through the circumstances under which assistance of that kind will be provided.

We're in early days yet with respect to the COVID situation. We haven't even dealt effectively at all with the disease itself. Obviously we're still right in the midst of the economic downturn. This will be a process of some years yet to come. I think there needs to be a concerted effort to build a much more aggressive fiscal policy response for dealing with these gaps in the policy framework.

**YPFS: Some of your writings seem to argue that U.S. Economy came out of the crisis somehow diminished. Is this slow, long climb back inevitable or is it even desirable to avoid inflation and other ill effects on the economy? Is this just the result of some monetary policy or some other actions that could have been worked out differently?**



Wilcox: I think it's a combination of factors including some misjudgments. I think there was a premature move to fiscal consolidation too early in the recovery period in the early 2010s. There was a very substantial initial injection of fiscal support, no question about it, and a lot of people paid dearly in political terms for courageously supporting that. But too quickly, especially in retrospect--and even to some degree at the time it was apparent--attention shifted to consolidating the fiscal position and underappreciating how much support the economy continued to require.

One thing the economic literature had good evidence of before the financial crisis, and unfortunately, the financial crisis only added to that literature, was the scarring effect of long spells of unemployment on individuals. The fact that their marketable skills deteriorate, their network connections to employers and to colleges, to people that they know, those decay with time out of the labor force. And so, the urgency is great to build the economy back as rapidly as possible in order to try to prevent that kind of scarring effect from becoming deeper and more long-lasting.

We also know that the economic impact of downturns is felt desperately unevenly across demographic groups, across communities. We know that African Americans experience an increase in the unemployment rate that is a multiple of that experienced by whites. In the case of African Americans, that multiple is about 1.8. When the unemployment rate for whites goes up by one percentage point, the unemployment rate for African Americans, historically, has gone up by about 1.8 percentage points.

For Latinx individuals the multiple is about 1.5, so again the labor market downturn that is experienced by both African Americans and by Latinx individuals is qualitatively different, qualitatively more severe than the labor market that is experienced by whites. That means that economic hardship is distributed grossly unfairly across these communities. These differentials, in terms of labor market severity, remain even after one attempts to control for other individual characteristics such as educational attainment or age or other potential factors that one might point to as ameliorating or explaining away the situation.

We also know of course that individuals by race and ethnicity are not distributed evenly or randomly across the landscape. We know that with a high degree of segregation in our residential arrangements, there are obviously concentrations of Latinx individuals, concentrations of African American individuals. Because those populations are experiencing the downturn more adversely than whites, that means that the communities in which they live suffer much more greatly because of financial and economic arrangements like local area funding of schooling. That hardship tends to get perpetuated from one generation to the next.

All of that is by way of saying that a long slow climb out of the financial crisis, I think to some degree, reflected circumstances that were very difficult to overcome, including the impairment in the effectiveness of the financial system, despite widespread efforts to support the financial system; the enormous increase in risk aversion, or to put it differently, the decrease in willingness to take risk on the part of ordinary households, on the part of business decision makers and others. Those factors were going to contribute to a lengthy recovery period. The recognition on the part of millions of households that prior to the financial crisis they had assumed too much debt. They needed to deleverage. They needed to improve the situation of their balance sheet. That deleveraging process was going to, I think inevitably, prolong the recovery period. Those are just some factors that were going to make a speedy recovery much more difficult to obtain.

But by the same token, as I said, I think there were some decisions that in retrospect proved to have been mistaken. There was too quick a withdrawal of fiscal stimulus. For a period of time through the early part of the 2010s decade, fiscal policy was pulling in the wrong direction. Monetary policy continued to be expansionary with the fund rate held at zero and with the Fed continuing to undertake large scale asset purchases. Too early in the recovery process, fiscal policy shifted from expansionary to contractionary. That did have the effect of slowing down the recovery.

Lastly, as you alluded to earlier, there was an absence from the policy tool kit of effective means of reaching ordinary people. There was inadequate attention to the effectiveness of the social safety net. Those, I think, were all contributing factors.

I'd say one last observation here is that I think the mechanism of the COVID collapse that we experienced this year is extraordinarily different from the mechanism of the financial crisis. There are common elements but I think it's important to recognize that not everything is the same. None of us knows, for example, when a safe and effective vaccine will become available on a massive scale to the general population. Similarly, none of us knows if and when a truly safe and effective treatment for COVID will become massively available.

We do know two things. One is it will be extremely difficult to achieve complete and durable economic recovery until the disease has conclusively been put in the rear-view mirror by one of those two means, either a treatment or a vaccine. Until that time, it'll be impossible to achieve a full economic recovery.

The flip side is that once that does happen and a very large portion of the population is immune to this disease, that will actually provide a clearer recovery signal than is available in the course in an ordinary economic recession. Usually in the course of an ordinary economic recession there's a

gradual dawning that the labor market situation is getting better, but there's no all-clear whistle that sounds, that says, "Wow, the initial impetus for this collapse is now gone. Let's unequivocally get on with the task of rebuilding." Here I think in the midst of a very, very concerning (and) very, very dangerous situation, one reason for hope is that at some point in the future, (none of us knows when) there will be a more unequivocal all-clear signal that we can get on with the business of building a durable, and hopefully equitable, recovery.

**YPFS: If you were to write a memo to your younger self, listing what you learned during the crisis that's applicable to the future, what would be your topline points? What would you put in your PowerPoint slides?**

Wilcox: I think there's a fairly lengthy list of those lessons. I'll try to be reasonably condensed in my summary of them. At the top of my list is the need not to worry about moral hazard in the moment. Don't worry about adverse implications for risk-taking in the future because people will look back on whatever current rescue you're undertaking. It's much more important to take the actions in the moment that are necessary to prevent the collapse, and then worry later on about building a more sustainable framework for risk taking, for decision-making in the future. It is important later on to address in a realistic manner the incentives for risk-taking, to shape the beliefs that decision makers have about whether they will be bailed out from bad decisions. Those are remedial actions to be taken in the future, not in the moment. The heat of the crisis is the time for action and later on is the time to build a more durable economic and financial regulatory structure.

Second, I think it's important for economists as breed a more skeptical view, and not to make excuses or to think up reasons for why it might be rational for private decision makers to do things that seem extraordinary, or unprecedented, out of line previous trends. One lesson that we as a profession broadly learned, particularly during the buildup during the financial crisis, was that if trends are getting out of line with previous norms, those trends need to be challenged, queried. Economists need not be too polite or shy about questioning trends that look unsustainable.

Thirdly I think it's important for economists, forecasters, and other analysts who spend most of their professional careers in normal economic and financial circumstances, not to underestimate the potential of the financial system to destabilize the real economy in a time of financial crisis. In normal times one can analyze the dynamics of the real economy--by which I mean things like GDP and the labor markets and inflation--mostly treating the financial system as a rather benign factor in the background. But in a time of crisis, the financial system suddenly becomes of first-order importance, so the usual separation between the real system and the financial system utterly breaks down and in that moment the financial system suddenly acquires tremendous potential for destabilizing the real economy.

Next, I would say that decision makers in a time of crisis don't have the luxury of solving crises sequentially. It's almost unbelievable how rapidly events unraveled in the fall of 2008. Policy makers, senior policy makers, had to deal with all of these situations all at once. They did not have the luxury of buttoning up one crisis situation and then turning their attention to others. It is difficult for people who have not experienced a true crisis situation to understand the cascading of events that can take place.

Next, I think it's important not to underestimate the importance of clear communication: of explaining what you're doing, why you're doing it, the authority that you have for taking those actions, the objectives that you have, the basis for your decision making in the facts that you see around you and what the effects are that you expect from your actions. Both in order not to over-promise, but also to make clear about how much worse you think the world would be if you didn't take those actions. Oftentimes, if you can't explain clearly what you're doing and why you're doing it, in a way that is accessible to a non-technical, non-specialist audience, that's oftentimes a signal that you need to go back and rethink the fundamentals of what you're doing.

Then just two more. One is that in the new world where interest rates look set to be low for the foreseeable future--many years into the future--it's clear that fiscal policy is going to have step up its game. This was apparent during the financial crisis. It's become even more apparent in the COVID collapse this year. But central banks have only a limited tool kit. I think the Fed has performed really magnificently this year in exercising the tools that are available to it with force and speed. But, it's clear that fiscal policy matters enormously. Fiscal policy is going to have to play a larger role going forward than it has proportionally in addressing economic downturns.

Then lastly, distributional considerations matter enormously. It is incredibly important that policies be designed to reach all segments of the population without regard to race and ethnicity, without regard to level of income, without regard to political connectedness. It's critically important that we choose tools and methods of implementation that ensure effective support for all segments of society. The horrifying aspect of the financial crisis of a decade or a dozen years ago, and of the COVID-related collapse is that these kinds of events have enormously disproportionate adverse implications for individuals, for groups, for communities that historically have been relatively marginalized. It needs to be high on the list of priorities for policy makers in coming years to figure out more effective means of delivering financial and economic support in ways that reach those individuals and communities in a more equitable manner. The well-functioning of the economy is going to depend critically on that.

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