

THE BROOKINGS INSTITUTION

PRIVATE CAPITAL, PUBLIC IMPACT

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**PARTICIPANTS:**

**Welcome:**

MARTIN BAILY  
Senior Fellow and Director, IBPP  
The Brookings Institution

**Keynote Address:**

THE HONORABLE MARK WARNER (D-VA)  
United States Senate

PANEL ONE: OPPORTUNITIES AND CHALLENGES

**Moderator:**

DAVID WESSEL  
Economics Editor  
*Wall Street Journal*

**Panelists:**

SARAH ALEXANDER  
Founding President and Chief Executive Officer  
Emerging Private Equity Association

DAMON SILVERS  
Director of Policy  
AFL-CIO

DEN WHITE  
Senior Counsel, McDermott, Will & Emery  
Former Chairman of the Board, Association for  
Corporate Growth

MARK WISEMAN  
Executive Vice President, Investments  
CPP Investment Board

## THE ROLE OF PRIVATE CAPITAL POST-FINANCIAL CRISIS

### **Presenter:**

JOSH LERNER  
Jacob H. Schiff Professor of Investment Banking  
Harvard University Business School

## PANEL TWO: PRIVATE CAPITAL -- RESEARCH FOR IMPACT

### **Moderator:**

MARTIN BAILY  
Senior Fellow and Director, IBPP  
The Brookings Institution

### **Panelists:**

JOHN HALTIWANGER  
Professor of Economics  
University of Maryland

MANJU PURI  
J.B. Fugus Professor of Finance  
Duke University

MORTEN SORENSEN  
Daniel W. Stanton Associate Professor of Business  
Columbia University

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## PROCEEDINGS

MR. BAILY: Welcome. Thank you to everybody for turning out on such a wretched day. And we hope that we will justify the effort you've made.

I'm Martin Baily. I direct the Business and Public Policy Initiative here at Brookings. And, in part, this meeting today is to launch the Private Capital Project at Brookings, which is going to be run in collaboration with Joshua Lerner, who is just sidling down there. Josh, I think, is probably well known to many of you as an expert on venture capital, private capital and innovation. He's at the Harvard Business School.

So Brookings will be running this project in collaboration with the Private Capital Research Institute, which is where Josh will be located nominally. But we're going to work together on this project.

And the idea is to find out more about the impact of private capital of various forms on the economy, both the United States, other advanced countries and, we hope, also emerging markets as well.

So that's a big agenda. We're not going to cover all of those, all of the topics early on, but we think this will be, probably, a long-term project, running over several years -- and will involve, I think, academics from a number of universities. But we also hope to interact with people in the industry, in labor groups, and policymakers here in Washington to just get more information out there about what private capital is.

I'm very pleased to introduce Mark Warner as our keynote speaker, for a variety of reasons. He's a great senator, as you know, but he also has personal background as a businessman, and part of a venture capital firm.

Before being elected to the Senate in 2008, Senator Warner was Governor of Virginia, during one of the State's worst economic downturns. And he worked in a bipartisan way to make the state government more effective and affordable, and ultimately turned a record budget deficit into a surplus.

Before being a governor, as I mentioned, he was a successful businessman, serving as cofounder and managing director of Columbia Capital Corporation. And he also co-founded the telecommunications firm Nextel.

As many of you know, Senator Warner was one of the key players in the financial reform legislation over the past year. And he partnered across the aisle with Senator Bob Corker and others, to organize what *The Washington Post* called "master classes in teamwork," bringing in various people, including Ben Bernanke, former Fed Chairman Alan Greenspan, and so on. And me. But I didn't include myself in the master-class category. Nor did my speech-writer, apparently.

(Laughter)

I was interested to learn that he started his career 30 years ago as a staffer to Chris Dodd. And that must have made for an interesting dynamic when the financial reform was going on.

He also used to be a vintner, a wine maker, and he has remarked that if you want to know how to make a small fortune in wine, you need to start with a large fortune. And that's why he apparently is no longer a vintner.

I also hear that he opens up his courtyard every Halloween and has scared many a neighborhood child with his "ghoulish cook" costume, and spaghetti and eyeball stew. That sounds very intriguing. And I don't know where that came from, D.J., but that was a great tip.

Anyway, given his past experience and his current position, we are delighted to have Senator Mark Warner.

Mark, thank you.

(Applause)

SENATOR WARNER: Thank you very much.

Well, thank you, Martin. Thank you for that introduction. Thank you for your friendship, your assistance on the Dodd-Frank Bill, and for all the things Brookings did to help that collaboration.

Apologies on the front end for being a bit tardy. The good news is I'm not going to go through a litany of all the things that the Congress has done in the last 18 months. I'll have to spare you on that.

The bad news was that one of the things that -- I also like to emphasize all these things that I did as Governor. One of the things I cannot say that we accomplished when I was Governor -- and proud of what we did -- was

solve Northern Virginia traffic, especially on rainy mornings. So coming in took a little bit longer.

I think it's interesting -- and, you know, I want to go through my remarks fairly quickly because I'd like to get questions, comments, suggestions, because I think this topic of how we get private capital -- the role of private capital in the market, and how we get private capital back, engaged in meaningful investments is terribly important. I say this firsthand. Martin mentioned the fact that I've got a business background.

There are people in the room like my good friend and college classmate Rick Morris, here, who knows that my business career was not a linear progression. My first two businesses failed miserably. And I'll still always remember, you know, sleeping on my law school and college friends' couches, two years, a year-and-a-half out of Harvard Law School, flat broke and getting into the early of the cell phone business. And all of my law school classmates in particular saying, "Warner, you are so crazy. Go get a real job. Who's going to want a car phone?" I remind, especially, my law school classmates of that, if they still bill in six-minute increments.

So I have some knowledge from both the public and the private sector side of the essential notion of the role that private capital plays. And no matter how good the idea, without that private capital how it can not turn into innovation, job growth and real creative endeavors.

You know, I do think that one of the things that hasn't received enough attention, outside of kind of academic areas, is how -- and I realize there are folks here, particular from PE firms, and others, and some of this will hopefully make you a little bit mad -- but, you know, the last 10 or 12 years, and it's not really one political party over another, but there's a lot of factors, I think, that have changed the role of private capital that maybe don't get enough scrutiny. Some of this is fairly obvious, but from a policy-maker side, I don't think we really spend much time about it.

And, you know, they're obvious things -- the movement of private capital knows no boundaries. And that's a commonsense thing in an internet-based world, but it really has, I think, dramatic implications. That, combined with the fact that private capital moves 24/7, the fact that, you know, with the ability to move capital so quickly between markets, between whole economies around the world, and the transaction cost of moving that capital has been driven down so much that for, you know, 10, 20, 30 basis points you may move huge amounts of capital on a very short-term basis.

So the notion and value of long-term, patient capital has been, I think, exponentially diminished. And I think that's really -- I don't know how you reverse it. I'm not sure it's fully been understood by a lot of policy-makers.

I think, as well, that we've seen that even as late as the '90s when, you know, a lot of private capital was still in traditional corporate finance, that there was still a lot of innovation going on in infrastructure financing -- and in my

area, in terms of venture capital, where so much capital was pouring -- a lot of that has slowed dramatically over the last 10 years. And I will even be critical industry, the venture capital industry. The good venture capitalists in the late '90s and early 2000s go so much money that while they still called themselves venture capitalists, they really became PE firms -- and nobody was basically doing the early-stage, hardcore startups, that if you start to look back now from any kind of a statistical basis, where most of the job creation comes -- all of us in politics say, you know, "Jobs are created by small businesses -- " -- well, candidly, jobs are created by innovative, small gazelle-type companies that start up. They're not really created at the same rate from, you know, your dry cleaners or your small manufacturing company. It really is those early-stage innovation companies. And that kind of early-stage capital has disappeared -- to a large extent.

Instead, I think what replaced it over the last decade was we had a decade that I think history will look back and say was pretty much lost -- lost in terms of innovation, lost in terms of significant investment in long-term value propositions, particularly in America. Lost in terms of generating whole new ways of industries, the way we saw it '70s, '80s and '90s -- and instead was replaced by an economy that was propped up by an overheated real estate market and the creation of a whole series of financial instruments that were newly introduced into the marketplace

-- all under the guise of lowering the cost of risk when, in reality, I believe now, that many of these financial products and instruments were more about fee generation and about financial engineering than they were about true innovation.

Now, you can point to the outliers in the last decade. I mean, nobody's going to say that there's not a Google or a Facebook, or companies that have been extraordinarily successful. But if you look at the rate of success, particularly of early-state innovation companies in the last decade, it's pretty pitiful.

And, instead, as I mentioned, we had this economy that was based upon growth in the real estate market that, on any historic basis, could not be sustained. It was almost as crazy as those of us in the, you know, tech bubble post 2001, when we looked back at our portfolios in 1999 and 2000, and said, "How in the hell did we ever think those companies were worth what we thought they were worth for that moment in time?"

In a lot of ways, the whole basis of the cap rates around commercial real estate, the kind of increase, dramatic increase, in residential lending, the notion of no-doc loans -- all those things I hope, at least -- and I don't think there's really been any kind of that serious

reflection after the fact, "My God, how did we ever think that this house of cards that we constructed really could be sustained?"

And then we saw, as this started to unwind, the financial products that were supposed to be lowering the cost of risk really, in many ways, connected, as I said, this interconnected house of cards that led us almost to the brink of financial abyss. If this was a more -- less intellectual, thoughtful crowd, I would -- I've got a new great line that I use in my more traditional speeches which says, "You know, we need a few less financial engineers and a few more real engineers that build things right now." And while it's a little bit of a platitude, I think it is honestly true.

I think that, you know, the financial sector as a whole -- you know, every sector has got a little bit of black magic to it. I mean, we pay lawyers a little bit more because they speak a few Latin words. We pay engineers a little bit more because they talk about stuff that most of us can't understand.

The amount of black magic in the financial sector grew from a reasonable part to a part where large, sophisticated investors -- including, I believe, heads of some of our leading banks and investment banks -- didn't even understand the black magic that was going on. And at some point that all kind of collapsed upon itself.

So where do we go from here in terms of reorienting and getting private capital and its role redefined for policy-makers, for the market, for investors?

A couple more comments, and then questions.

One is, I also think that in light of the collapse -- and until I got the job as Senator and kind of dug into this -- and I'd spent 20 years around the markets -- I didn't fully appreciate how close we came to the abyss. One cool thing about being a Senator was you can anybody, almost, in the whole country -- or, for that matter, the whole world -- to at least call you back once. You know.

And Martin, and others, and Corker and I brought in a host of folks, and we got as broad a purview of how kind of riddled the whole system was with challenges, and from as many different perspectives as most. And it really is a system that still, I think, has inherent weaknesses in it.

I would argue that the two most politically unpopular things of the last two-plus years -- the TARP, under President Bush, and the Stimulus, under President Obama -- actually, that history will treat both of them as acts of pretty much significant political courage. That but for those actions -- and I can go into as much detail or as little as you'd like -- what we would be facing right now would be exponentially worse.

I see a lot of my colleagues, and hear some of the talking-heads at times who are appropriately unsatisfied with the recovery -- and I am, as well. But if we were -- I like to remind folks that if we were having this same setting even as recently as 14, 15 months ago, May, June of '09, when the Dow was at 6,500, when we were losing 700,000 jobs a month, when we had seen a 6-1/2 percent decline in our GDP -- and we weren't sure we were going to see a penny back off of the TARP -- if you would have asked most, even an erudite crowd like this, you know, would you take an economy at the end of September of 2000, where the Dow was touching on 11,000, when you were starting to see -- where we'd seen three solid quarters of GDP growth, where we started to see private-sector job growth again? And we were at 85 cents on the path, I think, back to 98 cents on the dollar back on every TARP? That would have been viewed as wildly optimistic.

So as ugly as this political process has been, I think we have kind of sorted things through.

Where do we go from here, now?

Well, I think one of the biggest challenges we have -- and, again, from kind of the private capital standpoint, and getting the economy restarted -- is, I think most of us would have to acknowledge, that government and the public sector has used most of its bullets. The Fed

has used monetary policy to lower interest rates to historic lows. There are clearly things, additional things. We had Chairman Bernanke in yesterday again talking about the deficit with a group of us. There are things they can still do around the margins. But the big guns have already been used.

What can the government do? Well we have -- you know, there are some in the room who may say we could do an exponentially larger stimulus. I don't think the political changes of that happening -- I think they're nil. We've used our stimulus dollars, effectively or ineffectively. But we've basically shot that bullet. We can, again, do things around the margins. We passed -- something that Damon Silvers and I worked on for almost a year, and the President signed this week -- a small-business lending facility. That will help -- around the margins. And we should have been passed nine or 10 months ago. It will help, but it's not going to provide all the needed activity that we have.

So where is the greatest opportunity to jump-start the economy? I would argue that the one -- again, not often enough discussed, the kind of hidden asset that's come out of this downturn -- is that large American companies, you know, the Fortune 1000, financially are in better shape today than they were pre-meltdown.

So how do we encourage some of that \$2 trillion that is sitting in cash on balance sheets to reinvest? Number one. And how do we also start to encourage -- and I don't know the numbers. You all would know the numbers better than I, they equal hundreds of billions or trillions of dollars of private capital that is parked in safe but low-producing returns, whether it's in Treasuries, or other secure investments off the sidelines into reinvesting? And I'll give you three or four ideas, and then, again, be happy to take questions.

And all of this challenge is compounded by the fact that if this was normal time, you know, we could be more free with spending policies or tax policies that we've had as tools in the past. What inhibits the use of those tools today is -- what we also have looming in the background right now, in either short-term or intermediate-term in background -- is the fact of the other issue that we've punted on for the last decade, the deficit. So everything we do now in terms of short-term generating this private capital and corporate capital off the sidelines back into the marketplace is constrained by the long-term effects of the deficit.

And, you know, we have these, obviously again, contradictory goals, where we want to tell the consumers, tell the banks, tell everybody, "Spend now, but in the long term save," we've got the same challenges with the government.

Case in point on this is the -- I'll give you one example in the kind of binary choice, in terms of the discussion around the Bush tax cuts.

Frankly, both sides are a little bit right. You know, the Democrats are saying, well, let's go ahead and allow 98 percent of all the Bush tax to continue for folks under \$250,000, and start to at least make a down payment on the deficit by taking the tax rates for people like me, and probably most of you -- at least Bill Coleman -- back up to the rates of where they were under Clinton and Bush-One. Makes good long-term deficit knowledge.

The Republicans are partially right in saying, well, hold it. At this moment of fragility, of an economic recovery, to take any money out of the economy doesn't make sense on a short-term basis, even if -- as some of the, I think, more honest among my colleagues on the other side will acknowledge -- you know, the top 2 percent may not be the most useful use. They're partially right on that. Taking those dollars out right now -- and Doug Elmendorf from the CBO did a presentation on this earlier this week -- you know, so you've got these choices.

There are some who've said, well, let's go ahead and kind of split the difference, and take that -- and simply delay the extinguishing of the top 2 percent, of the \$250,000-plus extension. Let's extend it just for a year or two. Makes some sense.

I have two problems with that. One is, you know, while I'm a new Senator, the one thing I've learned, if you give Congress the ability to punt, they will punt. And putting off the hard choice today until a Presidential election year may or may not be the best long-term policy if you're ever think about, truly, about deficit reduction.

And, candidly, while keeping the tax rates for the two 2 percent of our income earners, you know, is that really the best utilization of that -- if it's for two years, which is basically about \$65 billion, is that really the best utilization of those dollars?

I would posit another position -- that I'll be writing some stuff on and, again, would love some immediate feedback -- that would say maybe there's a way to bridge these challenges, and that would, again, with our goal of how we get private capital and corporate capital back into the marketplace -- why not let those, the top 2 percent of the tax cuts go ahead and expire, but recognize that we don't want to take that -- again, let's take two years as our peg number -- that \$65 billion out of the economy right now. And instead say -- particularly from an Administration that at this point has an unfortunate relationship with the business community -- and challenge the business community, to say, you know, "We're not going to take that out of the economy, but what could we do with \$65 billion of either targeted business-tax cuts and/or investments

that would be the most bang for the buck? -- in terms of either getting that \$2 trillion off the sidelines back into the economy, or getting the hundreds of billions of private capital reinvested. Maybe it's R&D tax credit, maybe it's expensing, maybe it's payroll tax holidays. Maybe it's certain things that haven't been part of the discussion yet. But it ought to be ideas coming from the business community to say, "How do we use this?"

I think, candidly, it would be a way that could perhaps bridge the political divide. It would also send a signal to the markets that over the longer haul that we are going to at least start making the down payment on deficit reduction. And it would preclude us from coming back and having this same debate in 2012, in the middle of a Presidential election. So, idea number one.

Idea number two, how do we -- as somebody who was on the Dodd-Frank Bill, and recognized that it is an imperfect product, I do feel some good about it because at the end, we almost got equal grief from both the left and the right -- you know, the left saying, "oh my God, you let the banks off way too easily. There's not tight enough, the rules." The right, some of them, saying "You've basically destroyed American capitalism." You know, with the fact of incoming from both sides like that made me feel pretty good that maybe we kind of got the balance a bit right.

We did do something in this bill that is going to have added transaction costs, in that a lot of the tough challenges have been pushed off to the regulators. I will acknowledge that. And, again, perhaps not all that thoughtful, but putting a slightly higher transaction cost on some of the more exotic financial instruments, in terms of regulatory review, I actually think might be worthwhile.

I know that one of the challenges we have with both, you know, corporate capital getting off the sidelines and private capital getting off the sidelines and reinvesting is regulatory uncertainty. And one of the things that, again, I'd like to challenge this group and others on is we're going to have some of that regulatory uncertainty because of Dodd-Frank, because of health care reform. But, again, one of the areas where I'd love to engage with the business community on is the creation of a regulatory pay-go approach.

You know, one of the things that the Federal government has not been very good about is we are always cumulative in terms of adding additional regulations. Rarely, if ever, is there an effort to go back and look at what's happened in preceding decades in terms of regulatory elimination or consolidation.

But at least in terms of a top-line idea, acknowledging that we're going to have new financial regulations, we're going to have new

health care regulations, a regulatory pay-go concept, that when you add one you've got to take one away, or at least consolidate, is a framing, again, that might give confidence to the business community and to the private markets that we're not going to go off totally half-cocked and create such a regulatory environment that America can't stay competitive in the long term.

Third thing we need to do -- and this is around the role of innovation, and then I will close -- you know, we've really not had a growth and innovation agenda in our country, again I would argue, for a decade-plus. And the innovation and growth agenda that most policy-makers roll out is pretty stale. It kind of is a very '90-ish mind set, I think. You know, it's "Let's do more R&D," "Let's give our universities more money," "Let's do immigration reform" -- all important items, but I really think we need to kind of brush that off and add and clarify a true innovation and growth agenda.

And I think it's going to have to be not only those '90s ideas, but I think it's really going to have to be about intellectual property protection. I think it's going to have to be around how we can do policies, both policy-wise and tax-policy-wise, that kind of regenerates focus on early-stage capital and true start-up efforts.

I think we're going to have to -- and let me quickly say I do not support, you know, industrial policy, but I do think we need to identify areas, as a nation, where we hope to remain competitive on a long-term basis. You know, let me give you three or four examples of that and, again, then we'll turn to questions.

One is -- and it's not very sexy, I know, but what has always been an American competitive advantage over most of the 20<sup>th</sup> Century has now turned into American competitive disadvantage is infrastructure. And how we finance infrastructure in this country, versus how it's financed in Europe and Asia and around the rest of the world, we are at least a decade behind, if not more, in terms of public-private collaboration on infrastructure finance. Desperately overdue for a fresh look.

Number two, manufacturing. I think it has kind of become a rule of thumb that manufacturing in America, well, we were going to replace it with technology, we're going to replace it with other types of innovation. And that was a casualty of a knowledge-based economy. I think that needs to be rethought. And let me acknowledge that perhaps I was even one of those that say -- you know, paid lip service to manufacturing, but really didn't know whether we could continue in this country.

I think the example of Germany, particularly post the last three or four years, a Germany that has higher wages and higher taxes than America, yet has led its way out of this worldwide recession through manufacturing and export -- that we have lessons that we can learn from Germany and other advanced manufacturing nations around the world.

Third -- and this is an area where I think the Administration has moved forward, but we need more juice behind it -- is export has to become a higher priority for all of American companies. You know, and we've had the luxury of not having to export because our domestic market is large enough. That luxury is gone.

We've got a billion Chinese and a billion Indians that want our jobs, but they also want to buy our stuff. And how we do a better job of using technology and tools to educate small to mid-size companies on export opportunities has to be a higher priority.

And then within specific policy areas, you know, we've started to move but we need, I think, again, more political consensus. And these ought to be areas that don't break down on partisan lines. But we need the involvement of both the corporate sector and the private-capital sector, in terms of how we get policy alignment right around, one, the lowest hanging fruit, or the most obvious, I think, that most of us agree on -- energy.

It pains me to say this as a telecom and IT guy, but I think there will be more jobs and wealth and jobs created in the energy sector in the next 25 years in the world than in any other sector. And right now we're getting out lunch eaten.

And what I thought was going to be the driving force around this -- you know, four or five years ago -- climate change has now become a religious issue, both pro and con. And, you know, frankly maybe we should more climate change as a rationale for changing our energy policy a little bit more to the side burner, and focus more on job creation and national security. But energy ought to be a place where, as a policy goal and a capital driver going forward.

I would argue a fresh look at broadband. You know, again, this was an area where America dominated, in telecommunications, up through the '90s. Right now, if you go to Asia or most places in Europe -- Korea, in particular -- they are a decade-plus ahead of us in areas like mobile broadband. And mobile broadband penetration is just one small example. It has the same growth rates right now as -- what's near and dear to my heart -- cell phones in the '80s, or internet usage in the '90s. And, you know, it simply takes the policy focus around freeing up spectrum as an area to look at.

There are secondary areas -- commercial space flight, a renewed focus on biotech, which means, again, both regulatory reviews and IP reviews. A fresh look, as I mentioned, on infrastructure.

But there are host of areas where we need more clarity, in terms of where America, over the next 10 to 20 years, is going to put a stake in the ground and say, "These are areas where we're going to be world leaders." I think if we do that, both the corporate capital and the private capitals on the sidelines will become reinvested, and we will sort through this topic that Martin -- this Brookings study -- is looking at, and at the same, hopefully, get it right in terms of job creation, and American leadership in this 21<sup>st</sup> Century economy.

So -- a little food for thought. I'm looking forward to questions and comments. I'm also looking forward to the work of this group, and hope that if any of these ideas spur some thinking here, I'd love to continue the conversation. Because trying to get it right from a policy standpoint is an important part of that discussion.

So, thank you very much. I'll be happy to take your questions.

(Applause)

Questions, comments, suggestions, criticisms -- knowing that I've --

MR. BAILY: Short questions.

SENATOR WARNER: Short questions, because my staff is giving me the hook.

I've lulled you all into submission.

Yes, sir.

SPEAKER: (Off mike)

MR. BAILY: Please tell us who you are. I mean, I know who you are --

MR. WISEMAN: Mark Wiseman from the Canada Pension Plan Investment Board. You're going to see me in one minute, here. Just a quick question, though.

You talked about the value of long-term, patient capital in the current world, very briefly about the fact that short-term capital flows back and forth very quickly.

What do you mean by that? And if you meant what I think you meant, that we should place more value on long-term, patient capital, what should government do to encourage it?

SENATOR WARNER: Well, we have --

SPEAKER: Like the Federal government, we're under water here.

SENATOR WARNER: Well, that's right. Like the Federal government the policy-makers have created us being under water.

You know, we have certain aspects -- you know, back up again for a moment. We have conflicting challenges around our tax code. You know, one of the things that I think we desperately need to do is to dramatically simplify our tax code, you know, lower our corporate tax rates to make sure that we are actually more competitive. You know, part of lowering our corporate tax rates in any kind of revenue-neutrality way would be looking at the fact that our current income tax collects a trillion dollars. We have a \$1.2 trillion in income tax exemptions. So there's a little bit of contradiction here in terms of simplification, at the same time saying a tax code that supports the holding of longer-term capital. You know, we have a little bit of that around capital gains but, you know, the notion of even lower rates for longer term, beyond the one-year hold. The possibility of an idea, not a policy suggestion today.

I had -- you know, we had a recent, very spirited area debate up in the Senate that has not gone away around something that is near and dear to anybody here in the PE world, or the VC world or the real estate world, around carried interests. You know, what should be the tax rates around carried interest? I was able to forge somewhat of a

compromise that said, you know, we're going to give a lower rate for carried interest held in excess of five years.

So, again, how we move in a broader way towards emphasis on patient capital is -- you know, I need your suggestions as much as anything on that.

But I think it is a problem, when you can move, in a click of a computer, you know, hundreds of billions of dollars around to get a marginal, short-term spread -- you know, I'll match my capitalist credentials with anybody in the room -- but you've got to have some rules of the road. And that kind of -- I'm not sure that kind of true economic efficiency model in all cases necessarily leads to national economic growth and job growth. And sorting that through is -- I know I'm on camera here, so going a little bit deeper into that will show up on a YouTube video if I'm not careful today.

MR. BAILY: Yes. Questions?

MS. POPLIN: Hi.

SENATOR WARNER: Hi.

MS. POPLIN: I'm Caroline Poplin.

I'm an attorney, not an economist, but it seems to me that in the '90s and the 2000s, an awful lot of money -- essentially, companies have disinvested in America. They've taken money out of the productive

sector, by mergers and acquisitions, one company takes over another, it fires a lot of people for a lean company. And all that extra capital goes into financial speculation. It doesn't go back to build up another business.

MR. BAILY: Let's get to the question.

MS. POPLIN: Okay.

And do you have an idea for encouraging investment in the production of goods and services, rather than just in a lot of financial back and forth?

SENATOR WARNER: Well, that's a -- well -- a great question, complex question. Because at some point you don't want to promote inefficient enterprises in a world economy. But at the same time, you -- you know, if everything is simply short-term bottom-line, you know, and financial manipulation means that always breaking up an enterprise into its part might mean short-term financial benefit versus the cost it plays in economic loss and jobs, and economic strength of a company -- trying to get that balance right, we've not done a very good job.

And I'm not sure how we balance it right. And if we don't balance it right, what you end up with is, you know, sometimes legislative intervention with blunt instruments that might sound good politically but aren't good long term.

I will also, let me make one other comment here, and I -- listen, when I was in venture capital I had companies that had international holdings, and based in other countries. I am not -- and I believe we've got to -- cannot be afraid of trade, and we're not going to reverse globalization. Let me say that as a caveat.

But I hear constantly -- and I say this as the kind of Democratic Senate business outreach guy, which is both curious that I was the first one they ever had, and the fact that they needed one. But, you know, I hear repeatedly from friends in the business community, "You know, Warner, we're getting these great opportunities. Country-X is offering all these incentives. Country-Y is offering these low wage rates. We're doing all this. We're going to move our operations over here."

You know, and I can understand that from a market standpoint. What's curious, though, is that all of these business leaders who say this to me never, then, follow up and say, if they're going to move all their operations to Country-X, they never say, "And you know what? I'm picking up and moving my family there, too." Or "I'm moving my senior leadership there, too."

No. It's still, well, I want to keep the benefits of having the world's best education system here. I want to keep the benefits of living in a free society here. I want to keep the benefits of living in a safe society

that our country provides. And all of these -- for the economists in the room -- the "externalities" that we have spent a hundred-plus years developing in this country, somehow that doesn't seem to be valued by leaders who simply have a short-term, quarterly output.

Now, you know, that can quickly ramp into kind of a dangerous conversation. But somehow engaging with the business community -- and this is where we need a detente between business and the Administration -- we've got to, you know, we've got to get on the same page. And there's some blame to go around on both sides.

And, you know, getting that balance right is really, really important.

I know -- I've got to go.

Yes -- Bill Coleman gets the last question, then I'll get out of Dodge.

MR. COLEMAN: (Off mike)

SENATOR WARNER: No, you've often been first.

MR. COLEMAN: Thank you very much for a wonderful speech, Senator.

I would suggest that we all should start first by reading Alexander Hamilton, because he was the one of the founding fathers who said for this country to be great it basically has to be a private capitalistic

system and the government should do only those things to regulate this system or they can't do it.

And my concern, for example, when I was young I thought the automobile companies would be here forever. But what happened was Toyota wanted to build cars in Tennessee, the government gave them the land for free, built the building for them, and the labor union came in at 35 percent less than the one in Detroit. And that made a difference.

On the other hand, I think that Ford Motor Company needs to take that money -- and I think it's going to be one of the good automobile companies.

And the only thing I had trouble with your presentation is the rest of the world is getting as smart as we are. As I tell my clients, when George Washington defeated the British down in Virginia, it took a month before the British realized the defeat. Now you do in five minutes.

And I just think --

SENATOR WARNER: Five microseconds.

MR. COLEMAN: Yes. So I just think we make a mistake to think that these other countries aren't doing it.

And I really think that we first ought to determine those things the Federal government is doing that private industry could do

better. Like, for example, I think that private industry could run the entire rail -- freight railroad system better than the government. And Chessie says it wants to have trains that go all the way to Boston at 167 miles an hour.

So I really think we have to study each one of these companies and then determine which the Federal government should get out of, and which there is a role for new ventures.

SENATOR WARNER: Right. I don't disagree with that. And I think that, you know -- I think the old big government-small government argument is a 20<sup>th</sup> Century mind set. It ought be smart government, efficient government, and where you get the best value.

But we have seen at times -- whether it was the financial sector, where we had absence of regulation, and no rules of the road, that created a crisis. Or as recently as the Gulf oil spill, where perhaps, you know, at least appropriate rules of the road made sense.

And I think I'll close with your comment, Bill. You know, I desperately think -- you know, probably everybody in this room would agree that high-speed rail ought to be a place where we ought to be investing. And we made an incremental amount. But, candidly, I don't see how any private-sector company -- and the numbers are so large that the process of getting approval so long -- and part of that, I think, should

be actually -- you know, on T-infrastructure projects that are leapfrogging, I think we ought to have an expedited approval process.

But the process takes a while, and the capital is so large, I don't think there's any private-sector company that will make enough of an investment to ever build that. So putting in place ways, at least around infrastructure, where government can spark, makes sense.

I would love to have more private-sector infrastructure. Virginia has done more of this than anyone around. But it is a misnomer, at times -- I remember -- I'll close with this comment -- I remember, at the end of my governorship there was a proposal that came out, where a private-sector company came and proposed to take over the Dulles toll road, buy the Dulles toll road, for \$1 billion. I felt like it was like Dr. Evil from, you know -- what's his name? -- that Austin Powers movie. You know. And a lot of the legislators were saying, "Oh my gosh! Free money! A billion dollars! Isn't this great!"

Well, anybody in business school 101 would have seen, this was a fool's-errand deal. And realizing that private sector investment, at least in infrastructure, ought to be one of our tools, but the notion that it's coming for free? Or the notion there's not going to be a rate of return is just absurd.

So getting that balance right, that's what my job and your job to help policy-makers is to try to do it.

But I concur with your belief that, you know, at our core, the job generation, the engine of our economy has to be the private sector. And we have to make sure that private sector has the confidence to continue to invest in our country.

And I hope -- and a lot of that's going to mean getting that, in the short term, getting that \$2 trillion off the sidelines, and getting the private capital that's sitting in low-value investments back invested in this country.

Thank you all very much. I hope you'll keep me up on this.

(Applause)

MR. BAILY: Thank you. We have a great program for the rest of the morning.

And next up, Dave Wessel is going to moderate a panel. So I'm going to turn it over to you.

MR. WESSEL: Could I get the panelists up here?

I'm going to start talking while they sit down so we can get closer to being on schedule. But I guess we're running on Senate time today, so I hope none of you have plans for this evening.

(Laughter)

I'm David Wessel. I'm the economics editor of *The Wall Street Journal*. And the point of the discussion we're going to have for the next half hour or 45 minutes is very simply put -- you could make a lot of money in private capital. And a lot of people do.

The question is: What does it do for the rest of us? What does it do for the overall economy, for current prosperity? Does it make it more likely that our kids, and the kids in other countries of the world, will live better than we do?

And we have a particularly interesting and diverse panel to discuss that this morning. I'm going to introduce them in the order in which they're going to speak.

First we have Mark Wiseman, who is the Executive Vice President for Investments of the Canada Pension Plan Investment Board which invests, essentially, the Canadian equivalent of social security money -- 17 million Canadians, \$125 billion worth. Before he took this job, he headed the private investments department of the Canadian Pension system. They do something, of course, that we don't. They put their social security fund into private markets.

Secondly, we have Dennis White, who's a senior counsel at the law firm of McDermott, Will and Emery, but more importantly for our discussion today, is an immediate past chairman of a group called the

Association for Corporate Growth, an organization of mid-sized private equity firms.

Third, we have Damon Silvers, general counsel of the AFL-CIO, who has already been lauded by Senator Warner.

And, finally, immediately at my right is Sarah Alexander, who's the found president of a group called EMPEA, which promotes the development of private equity assets in emerging markets. It's a group of leading fund managers and institutional investors interested in that.

In the discussion we had over coffee beforehand, I asked the question -- because it wasn't obvious to me -- "What do we mean by 'private capital?'" And I want to give you the answer before we turn to the panel.

According to the organizers, we think of private capital, in this context, as buyout funds -- commonly known as "private equity funds" -- venture capital, angel investing, and the investment done by national governments, like the pension fund or sovereign wealth funds in private capital. It is essentially not the money that comes from banks, and not the money that comes from the public, publicly-traded stock market.

It amounts to, the guesstimate of the group is about \$3 trillion worldwide, which compares to about \$20 trillion worldwide in global equity market cap.

But as one of the panelists pointed out, another way of looking at it is that 90 percent of the business assets in the world are held privately. They're not held by General Electric or United Technologies or Boeing or News Corp or other publicly held companies, but they're held in one form or another by private entities, where their equity is not traded on exchanges.

So for now, let me start with Mark. And each of the panelists is going to speak for about five minutes and then give us time for a little bit of discussion, and then leave time for coffee, I hope.

MR. WISEMAN: Well, great. Thank you. And I won't talk about infrastructure -- though after Senator Warner was up here, I'm willing to offer \$1.1 billion for the toll road. But there's a whole other discussion to be had about infrastructure, and maybe that's time for another panel. Because that's another area where we invest very heavily, and where private markets and public policy can actually align quite nicely.

Very quickly, on the Canada Pension Plan Investment Board -- the Canada Pension Plan Investment Board is an independent organization that operates at arm's length from the Canadian government to invest the excess assets of the Canada Pension Plan, Canada's national old-age pension plan.

Today we have \$135 billion in assets. And that is a reserve fund to help pay future pensions in Canada. And, by the way, Canada's old-age national pension system is actually in a small surplus. I know that's shocking to those of you around the beltway, but it actually is something that we accomplished through reforms in the late '90s north of the border.

Of the \$135 billion that we have invested today around the world, approximately 25 percent of those assets are invested privately -- in other words, in non-listed securities. That would include infrastructure and real estate, but it would also include a large proportion in private equity. In fact, we have somewhere close to \$20 billion invested in private equity, both through private equity funds and as a direct investor -- something that sets us apart from most U.S. pension plans.

So the question is why? Why do we invest so heavily in private assets around the world?

And the answer actually goes back to an article published in 1989 by Michael Jensen in the *Harvard Business Review*. And essentially -- the name of that article, if you haven't read it, it's called "The Eclipse of the Public Corporation." It's wonderful reading. It's as true today as it was in 1989.

But if you want to boil it down, as a long-term investor and provider of patient capital -- which is why I asked the question about what's the government going to do in this country to encourage more of it, because we have a lot of it -- it comes down to what I describe as "governance arbitrage."

Quite frankly -- and I'm going to go through six reasons -- there is a better alignment of interests and therefore, in my view, greater economic efficiency both for the investor and for the economy as a whole, in private assets as compared to the public corporation.

Why? First is, there's much better alignment of the interests of owners and managers. If the CEO of a public company is misbehaving, or the board is misbehaving, one has to go through a lengthy proxy fight to replace them. By comparison, in one of our private companies, if we're not happy with management in the morning, we fire them in the afternoon. So much, much better alignment of interests between owners and managers. And we know, if we just read the papers about who has been taking place in terms of incentives through the last part of this decade in public corporations, how important alignment of interest is between those managing our corporations and those who own them.

Secondly, private capital allows for a much more efficient capital structure in the corporation because you can better align the

amount of risk that one would like to take as between equity holders and debt holders. You can get much more efficient capital structures.

Generally that means a greater use of fixed income and greater use of debt in the companies. That lowers the cost of capital to the enterprise, and should allow the enterprise, by and large, to invest in productive growth.

Third, for us as an institutional investor, quite frankly, some assets -- 90 percent, as was mentioned by the moderator -- 90 percent of assets around the world are held in private hands. If we want to diversify as an institutional investor we have to be able to invest, at least in part, in that 90 percent of the world that's not publicly listed so we can diversification and get access to assets like infrastructure that by and large aren't available in public markets.

Fourth -- and this goes back to the alignment of interest point -- long-term decision-making. We manage our assets for the next quarter-century, not the next quarter. And we can make decision in the private companies and private investments that we own that create long-term value -- not just a pop in the stock price in the next quarter. We're going to hold these assets for a long time, and therefore we can make decisions about growth, about investment, about expansion that align to the long-term interests of the enterprise. And this is a very, very difference

between a public company, which is, effectively, managed to the next earning cycle.

The fifth point is in decision-making in the investment process itself. When guys who trade the public securities on our trading desk in Toronto decide to buy \$100 million worth of IBM stock, they read some analyst reports, they read a 10K, they read a 10Q and they push a button, and they buy \$100 million worth of stock -- by and large based on very poor information.

When we buy a private asset, we are able to go in and do due diligence. We can do environmental testing. We can subject management to psychological test -- literally. We do it. We can do much, much better due diligence and therefore take advantage of the information asymmetry, to close that information asymmetry gap that exists between buyers and sellers -- or, in the case of a public company, as between management and owners.

And, finally, the last point I'll make is about liquidity. Why do people invest in public markets or liquid securities? They invest because they want to be able to get out on short notice.

I will tell you -- if we haven't learned anything else from the last crisis, it should tell us that liquid assets aren't really that liquid. And so how much of a benefit are you really getting from holding what you think

are liquid assets? And, by the way, if you're \$135 pension plan and you own, in our case, about 2-1/2 percent of the Toronto stock exchange in Canada, which means, in some cases, hundreds of days of trade volume in some securities, how liquid are you in the public markets anyway?

So, you know, we are willing to take on that illiquidity risk because we don't think our liquid assets are that liquid to begin with.

So --

MR. WESSEL: Let me ask you stop there. But let me ask you one question.

This sounds great. So how come you don't have 100 percent of your money in private?

MR. WISEMAN: It's hard to do. And, quite frankly, we hope, over time, that that 25 percent will grow as a portion of our assets. Those assets are hard to get on the books, because they're negotiated, because you can't buy them just with the push of the button. Because, in the case of infrastructure, it literally takes years of negotiation, with government, for example. So it's just very hard to get those assets on the books. But if we could get more on our books, we would.

MR. WESSEL: Dennis?

MR. WHITE: Well, I just want to clarify -- there were no psychological tests for members of the panel before we agreed to join.

(Laughter)

As David mentioned, I'm immediate past chair of the Association for Corporate Growth, a non-profit devoted to the novel notion of promoting the growth of companies. We have some 13,000 individual members around the globe -- U.S., Canada, Europe, China. And most are involved in the middle-market deal community. Almost 3,000 of those members are private equity folks, and an even larger number are senior lenders, investment bankers, accounts valuation folks, lawyers who work with those private equity people in getting deals done.

Private capital covers a pretty broad gamut. And let me just try to clarify who our members are. We're not venture capitalists, our members aren't venture capitalists investing in startups and development-stage companies. They're also not sort of what I will call the "mega buyout shops," people whose deals are in the billions, who make the front page of David's newspapers. Rather, the deals are in the tens or hundreds of millions.

To be sure, we have members who are in New York, but we also have private equity firm members in places like Chattanooga and Milwaukee and Atlanta and so forth -- literally all around the country.

They don't regard themselves -- to use the pejorative term -- "financial engineers." They're fully engaged investors. They don't package deals and walk from them. They're very much hands on.

So what kind of deals do they do?

I guess, first, they do a lot of transactions with founder-owned, family-owned businesses, and help those unlock liquidity -- either totally, by selling their business totally, or taking some money off the table and continuing to be engaged in the company, and also taking advantage of the expertise that the private equity player has to bring.

Sometimes they buy what I will call "corporate orphans." A lot of major companies are focusing on their core businesses and looking at some of the business units that are sort of off at the margins, and letting them either wither -- but, in some cases, selling them off to private equity firms who have the resources and the interest in making those businesses grow.

And other times, they provide pure growth capital to companies -- companies that really want to grow their businesses, build plants, expand exports, build, pursue R&D and so forth. The reality is, for most middle-market companies, going public is not an option these days. I had breakfast with a gentleman today. We were talking about his meeting with a CEO of -- I guess I won't name the company, but it's a

household name. And he confided, "We couldn't go public in this market." The bar -- Sarbanes-Oxley has made, for all its good, has also made the cost of compliance so high that for a middle-market company to go public, it's a very, very tough road. And frankly, many of the companies that are public wish they weren't because the costs of compliance are so high.

So, the private equity firms have become really a principal source, if not the principal source, of growth capital for middle-market companies, to help grow them.

One reason ACG is so interested in this project is to clear up some misconceptions about what middle-market private equity is about.

Thanks, David.

MR. WESSEL: Thank you.

MR. WHITE: Surprisingly brief.

MR. WESSEL: Well, you know, Mark had this great thing where you start with six points, which makes it impossible for the moderator to cut you off.

(Laughter)

Very clever tactic.

MR. WISEMAN: Many, many panels.

MR. SILVERS: Well, I have to begin with a slight clarification that may be of no interest but to my colleagues, which is that I'm not the

general counsel of the AFL-CIO, my colleague Lynn Rhinehart is. I'm the Policy Director and Special Counsel. The confusion's understandable.

The question that was posed to this panel was, so what's the impact of private capital on our economy and our children's future? So far, I'm not sure we've gotten very far in answering that question. I confess, I do not have a statistically conclusive study to answer it, either.

But I'm going to make a couple of observations about it.

The first observation I'm going to make is really a definitional one. In case -- and I think the definitional issue associated with private capital, I think, has, if anything, become highlighted by Dodd-Frank.

Private capital is a wonderful word. I think it was invented by leveraged-buyout firms after the first movie *Wall Street* was released.

(Laughter)

I have no idea what the second movie *Wall Street* will produce in terms of neologisms.

But I want to say that I think that the list that we were presented with as a panel is incomplete. There's one really noticeable absence from our conversation, and that's hedge funds. I'm not the expert in the law of private capital that some of you may be, but as far as I know, there's no legal difference between a hedge fund, a leveraged-buyout fund and a venture capital fund. Now, of course, you can build them in ways

that -- I mean, you could essentially do this type of economic activity through some unique legal vehicle, but basically the legal structures are the same.

Now, so I think, though, that this conversation -- at least judged by what my fellow panelists have said -- is somewhat, largely, a conversation about funds that involve a fair amount of leverage, that buy private assets using leverage. And that's what the majority of what I'm going to say is going to be focused on.

I think these things really need to be talked about differently. Certainly the labor movement's view of venture capital is very different from our view of hedge funds. It's very different from our view of leveraged-buyout funds. And, in a sense, different than our view of sovereign wealth funds -- although I think that now you're talking about crosscutting categories, right? Because a sovereign wealth fund is a sort of pool of capital that can be deployed in each of these investment strategies.

So I think the beginning of any conversation about private capital should stop using the term "private capital." And let me give you an example of why I think it's completely misleading and takes you to a conversation that doesn't have any meaning.

To say something like “90 percent of business assets worldwide is held privately” is basically just to say that around the world, families and private partnerships own businesses. It has nothing to do with the types of pools of capital that my friend from the Canada Investment Board invests in, or that workers’ pension funds invest in through funds like Blackstone and KKR and so forth. Just a completely irrelevant number.

So if we talk about that number, if we’re talking about that category -- leveraged-buyout funds -- is the use of leverage by sophisticated pools of capital, moving around and buying private assets using that leverage, is that a good idea or not? And what does it produce? What kind of good does it create?

I don’t think you can really even begin to discuss this question -- now that you know what question you’re talking about -- without talking about what Senator Warner obliquely referred to when he talked about a trillion dollars in tax expenditures.

All right? There were two major tax expenditures that have been associated with the leveraged-buyout business from its inception. And the first is being hotly fought out on Capitol Hill -- one prominent private equity practitioner referred to it as analogous to the German invasion of Poland, this battle on the Hill -- and that’s the fight over

whether or not the partners in these firms ought to be able to pay capital gains rates on their income from their work. And that's the carried-interest fight.

The second tax expenditure that's associated with this is gargantuan -- and never discussed, even though it has, I believe, absolutely no economic basis. It's just simply a public policy preference. And that's the deductibility of corporate debt.

And since there's great enthusiasm in Washington these days, in some circles, for discussing tax expenditures around things like health care and retirement security, the AFL-CIO believes that we really have to discuss this question of the tax deductibility of corporate debt -- at least, and until someone can explain why it's any different, in fact why it's not significantly less defensible than the tax deductibility of workers' health care expenditures.

Now, even if you get through those two subjects, I think you'd have to ask yourself, all right, now what do we know about leveraged buyouts? We know that they are cyclical, that during times when -- as one very wise person at the OECD said in 2007 -- during times when risk spreads in debt markets are compressed, leveraged buyouts are very profitable. And then we have, then the inevitable sort of day of reckoning appears, and then we see who survives and who doesn't.

In that sense, I'm afraid, Mike Jensen's arguments, observations, in 1989 are as true as they were in 1989. If you think about that for a moment, it's not quite as positive a statement as you might think. By the way, Mike Jensen's whole paper assumed that investors in privately held firms had *pari passu* investments in both debt and equity. And by the way, if that's your business model you're in a whole different room. So if Mike Jensen's paper has anything to say to anybody, it's not to any of the private equity firms that I know.

So then the cyclical nature of private equity firms gives rise to the question of so what happens when you look at the whole cycle? I used to come to these meetings a few years ago right in the high point of the cycle and it was very unpopular to say that. I think now you can't have a serious conversation if you don't say it.

And, unfortunately, there's a lot of evidence that -- not a lot, there's some anecdotal evidence that what happens is the government rescues you. And I'll just give one example.

About five weeks ago the subordinate debt in the Hilton buyout was bought back by Hilton, to the great advantage of Blackstone, Hilton's owner. And who sold it? The Federal Reserve Bank of New York, which had gotten it from Bear Stearns. And at what discount? 44 percent.

So these things have to be unraveled before we can have any kind of serious discussion about exactly what the impact of private equity is.

And I'm going to close by talking about some people who have a big interest in this. Is there anybody in this room who stayed in a hotel in D.C. tonight -- or last night, or is staying in one tonight? Anyone staying in a Hilton? No one's staying in a Hilton.

If you're staying at a Hilton here in town, the people who made your beds, and make \$13 an hour, are being asked by the Hilton owner -- all right? -- to accept the following things: wage freeze, increase in co-pay, more work. Okay? I don't think they think that, given the other fact I told you about, about Hilton, I don't think they think that private equity's working out so great for them.

The labor movement's view -- which may not be shared by all of you -- is that it's a far better test how private equity works, from the perspective of the kind of policy objectives Senator Warner was talking about, it's a far better test to ask, "How did that deal work out for those folks?" And I should not, by the way, that there was a disagreement in the labor movement at the time that that deal was done as to whether it would be a good thing for workers or not.

But those folks, their well-being, is a better measure of policy objectives in relation to private equity than most of what we might be talking about here today.

MR. WESSEL: Thank you.

Sarah, do you want to turn to emerging markets, and do they have a lot to gain, the way the first two panelists said? Or a lot to lose, the way the third panelist said?

MS. ALEXANDER: I'm adjusting my remarks to kind of reflect some of the things that have been said up here. And I guess I'd like to start by saying that I don't think this panel is about the LBO world. We can use terms like "private capital," or any other term. I think that we've got a problem with terminology and everybody knows it.

But for the markets outside of OECD countries -- you know, Mexico, whatever -- and North America -- excuse me, Mark -- right now the term "private equity" is actually quite a popular term, and is basically understood in the very kind of classical way, which is it is -- you know, for them, actually anything sort of from "angel" to "venture" to early-stage, late-stage venture, et cetera. And the -- so I just want to change the frame of the discussion, at least from my perspective, because while there certainly are some one-off LBO deals in our markets, there are buyouts

that use very little leverage. And most of the investments don't look like a typical LBO deal here.

So, quickly -- and what do we do? Who are we?

I run an organization called the Emerging Markets Private Equity Association that was founded with the belief -- and this is really important -- that private equity is actually beneficial for developing companies and economies. It is also, you know, a potentially great investment return for institutional investors, but that's for some and not others, and it depends on who you invest in. So we come at it with this fundamental belief.

And I should just say one of the reasons that we've worked with Josh and others in the academic community, and folks at the World Economic Forum, and our counterparts across the globe, is that it's really hard to prove -- it's really, really hard to prove -- that private equity, across the board, in developing countries, in the United States, broadly defined using that term, is good all the time.

It's very easy for critics to pick away at the counter-examples -- for example, it's a Hilton deal, it's a this deal, it's a that deal -- of what went wrong. And the other critics sort of come back and say, "Well, look at this deal," and look at this deal and this deal.

And I think that the industry as a -- I think there probably is some consensus in this room that there are certain types of private equity, private capital investment that are actually, on average, really good -- and good for lots of different stakeholders. And I think it's this project that has to figure out how do we prove it.

In the markets that I represent -- which is sort of all the emerging markets -- our members are fund managers, institutional investors. CPP, down there, is a member. And we have as members the largest LBO firms and the smallest fund managers operating in Vietnam and Africa who are, you know, desperate capital from Western sources of capital.

So these fund managers in these markets are very much supported by their governments. And they're supported because of the belief of what this form of investment can do for companies and economic development in these markets.

So let me just mention a few things, and then I'll try to keep these short and we can discuss it. Three or four things.

One is, you know, corporate governance. Okay? When you're talking about emerging economies, small, family-run businesses, other types of businesses, bringing in an external long-term investor who can help, it's not even just sort of questions of corruption or not, it's just

professionalized. The amount of value you add by bringing in a professional board and outside investors can be very high. So you immediately can add value to the company, and get them ready for a potential listing.

You can have environmental and social impact that's fabulous. I mean, we're in the process of doing some case studies right now on some investments in Africa and South Africa. And while I'm sure there are counter-examples, we have quite a few examples where the fund manager has come in and set up AIDS clinics for the families and things like that, by using this extra capital. Why? Because they're trying just to be great social citizens? No. Because healthy workers matter. It's about productivity. It's about -- so you can take that to its next logical conclusion.

And so the third area that I would just say is in many of these markets, this is the only source of capital for growth. So we think, you know, raising money in the capital markets right now is hard here? You know, try some of these other markets. So if you want -- you know, there is no long-term debt in a number of these markets. So this is a critical source of capital to grow these companies and these economies.

Okay, just a couple of final thoughts.

A couple of problems which are clear. I just put this out for discussions, and then a couple of ideas to think about -- problems.

When policy and regulation is being made in the Western world on these issues, the developing world and emerging markets are an afterthought. But there is some quite serious impact. And so, I'm sure very few people in this room have thought about it, but Frank actually, for all its good or bad -- I'm not going to comment in terms of the U.S. -- but, you know, has this wonderful exception, I think, I guess, for venture capital in the U.S., however it's defined, but has not similar exception for small or venture-like fund managers outside of the United States. There's regulation going on in Europe, again, trying to regulate the LBO firms, et cetera, and the rest of the world is being caught in the net.

The second thing is that actually venture capital and private equity have a different problem in some markets -- for example, like China, where it's actually seen as a panacea for all the problems. So, sort of, you know, there's a lot of government intervention that, you know, in these markets that might distort returns.

And so I'll just close with sort of two thoughts.

Number one, I think I would encourage this study, this group, to include emerging markets in the core of what it's doing, because I actually think that if you can get the statistics -- which are very hard --

there are a number of lessons and data and information cases that can be learned, applied to the West, from these markets, where this really is about sort of growth capital.

MR. WESSEL: Thanks.

Let me ask a couple questions, then we'll turn to the audience.

Mark and Dennis, Damon made a strong point that there's a problem here with debt and leverage -- that it seems to be widely held that we had a debt-borrowing-credit boom that led to the bust that we've just lived through.

And, Mark, you said that that was one of the advantages of doing these private deals is that they're more highly leveraged. Is this a --

MR. WISEMAN: More efficient, which in many cases means more leveraged, but not necessarily.

MR. WESSEL: All right. But is this a means to getting us into trouble again? The more leverage -- is "private capital" just a nice way of saying we're going to borrow a lot of money and have less equity in the firms?

MR. WISEMAN: Well, a few things on that point.

First of all -- we're short on time, but I think we have a big debate here about how much systemic risk the private capital industry

caused, as compared to hedge funds and banks and other things. And so I'm not sure I see any systemic risk created by the activity of private investing.

What happens to debt that's provided by financial institutions, that's like saying the systemic risk is caused by people who took out mortgages, as opposed to the people who provided them, packed them up and sold them off.

So let's think about where the systemic risk is created in the system.

The other point I would say is, capital structures really don't have much of a difference. So if you want to take out the minus-t in your weighted average cost of capital equation -- which anybody who's done first-year economics knows is the reason why companies tend to have more debt than equity --

MR. WESSEL: Everybody here knows what you're talking about. You mean the tax break for debt.

MR. WISEMAN: The tax break that you get for interest deductibility -- well, that's fine. As a policy matter, public or private, if you want to change that equation, that's a policy matter. It doesn't take away from the long-term nature of private capital versus public markets.

And I would think, from labor's perspective, decisions that are made that are long-term in nature, and value creating a nature in the long term works out very well for labor, as opposed to the short flips.

So you can get rid of the minus-t. It doesn't matter.

MR. WESSEL: Okay.

MR. WISEMAN: It would still hold.

And, by the way -- same issue, by the way, on carried interest. I don't disagree with you on carried interest.

So I think all -- that, to me, is public policy that doesn't impact the benefit that you can have from long-term capital.

MR. WESSEL: Dennis, you suggested -- both you and Mark suggested that somehow better things happen in this private sphere where you can see what's going on, than in the public markets.

But I thought we've been told that one of the problems we've just been through is an absence of transparency, and that transparency is supposed to be good because it allows us the sunlight, and it allows for better markets, efficient.

What's wrong with transparency? And why is the absence of it in private capital a plus rather than a minus?

MR. WHITE: Well, I mean, the irony is if a -- particularly in the middle-market private equity firms, they come in and they actually and

in some, many ways, improve transparency. Because a lot of these family-owned business enterprises don't even have reviewed financials, much less audited financials.

So one of the things they first come in and do is improve the reporting systems, so you have a much better sense of how the company is performing.

I guess the question is should the whole public have a window into every private company? I think that's really taking it pretty far, in terms of how we want --

MR. WESSEL: Damon, you made the excellent point that when you make debt deductible, you're going to have more of it. But the two previous speakers made a different point which was when you have a lot of regulation that applies to public companies, well, there's going to be a lot of attraction of being in the private capital.

MR. SILVERS: Sure.

MR. WESSEL: Do you think that one public policy that has fostered the growth of private capital is this relentlessly increasing disclosures, the much-maligned Sarbanes-Oxley and stuff? Or do you think that's just a red herring?

MR. SILVERS: Well, I think that it's partly a red herring and partly not. And neither aspect of it troubles me greatly -- all right? Although I think you can look at data.

It's a red herring in the sense that really rapid growth of private equity during the credit bubble, during the broader credit bubble, was clearly the growth of leveraged-buyout funds funded by cheap debt. Much as -- the same thing occurred during a similar period in the late '80s, with more or less similar results, although we don't know the full outcome.

There is another sense in which the requirements of Sarbanes-Oxley -- and I should note that, when you think about it, exactly what requirements are people talking about? Because small firms have been exempted from 404, and have never been required to meet it. So exactly what's going on -- people talking about the requirement to sign the financials? Or the requirement to have an independent committee? It's a little unclear to me what exactly the Sarbanes-Oxley complaint is about.

But to the extent that there is any reality to it, that there are firms that cannot afford to have an independent audit committee, or whose executives are unwilling to go on if they have to actually sign their financial statements, those funds should not be in the public markets. They should not be in a place where our members' 401(k) plans are blithely trooping into them.

The place those firms ought to be is where this gentleman and his team of psychologists are. Right?

(Laughter)

And -- you know, seriously. They ought to be where very skilled teams of expert money managers, with resources and lawyers and all that stuff, do their due diligence.

MR. WESSEL: Okay, thank you.

Here's what we're going to do. We have to catch up. So I'm going to ask for some short questions. Let's take a couple, and then we'll let people respond. And I know it's not very satisfying, but it's for the interest of the greater good.

So does anybody want to ask a question?

Nobody? We can catch up real quick.

Okay, do any of you want to say -- is there anything left unsaid, or should we give Martin back his time so we can get back on schedule.

MR. WHITE: I guess the only thing I would say -- I don't know if you saw, but in the last month, you know, China has announced that it's going to invest, as a government, \$15 billion in industries, state-owned enterprises, that build hybrid cars and electric cars. And I don't think anybody in this room would suggest that -- particularly, some

remarks that were made earlier -- that we should be doing that as a country.

But it really is sort of a cold bucket of water in all our faces, saying, hey, we live in a global economy where there are governments that are writing checks for huge amounts of money. And, ironically, governments -- you know, we've done programs in China -- where they themselves are still interested in attracting U.S. private equity for their companies.

But we're competing on a global stage, and we've got to really think of ways to promote investment in companies if we want to grow.

MS. ALEXANDER: I would just encourage people to think about sort of not just are we operating on a global stage, but what has happened over the last 10 years, and where we're going to be.

I mean, you know, it's almost as likely now that a major private equity firm in the U.S. is going to be backed by U.S. dollars as it is that they would like to be backed by Chinese dollars -- right? So this is really becoming a global, a global flow of money.

And not only that, you know, many fund managers, many of the best fund managers in these high-growth markets, are beginning to turn their sights away from the Western institutional investor market, if

they can, because you are seeing the development of local institution investor communities in places like Brazil and Colombia and Peru and China -- beyond sovereign wealth funds, sort of insurance companies, et cetera.

So if we're not careful, if one does believe that not only is there a good return but there is a positive economic impact -- if we're not careful, institutional money from the U.S. is going to be more and more sort of shut out from some of these best opportunities.

MR. SILVERS: I just -- I want to say something about what Dennis just said, because I think that for this project, for Brookings' project in this area, the critical question -- beyond the kind of John Rawlsian-type question I posed earlier -- the critical question is, given how much capital moved into VC funds, hedge funds and leveraged-buyout firms over the last 10 years -- trillions of dollars, as you noted -- it's how much of it has been managed in the United States?

Why was that capital not deployed around the critical, strategic industries that Mark Warner mentioned and that you just alluded to in China? Why are we falling so rapidly behind in these critical areas -- considering how much capital could have been deployed?

MR. WESSEL: With that provocative question we'll go to the coffee break for -- 10 minutes?

MR. BAILY: Five to 10 minutes.

MR. WESSEL: Five minutes.

(Applause)

MR. LERNER: All right, we're going to have, immediately after my talk, a panel which tries to visit a bunch of the issues -- a bunch of the issues that were sort of talked about on the practitioner thing from more the academic side. So, I think we'll get a chance to sort of really dig into a lot of the issues that came up in terms of the discussion and say what does the academic evidence really tell us one way or the other, pro and con, in terms of the stuff. It's probably fair to say that the most of the most academic evidence isn't terribly satisfactory either and will hopefully leave people wanting more, which is what we're going to be delivering over the next couple of years.

But I thought I'd do something a little different in this talk, which is rather than sort of previewing the -- you know, spoiling the punch line of what Morten and John and Manju will be sharing, is taking a little bit broader view in terms of saying what do we really see about this private capital as a sector and what can we say about where it's likely to be going and how it's likely to be evolving in the years to come, because it is fair to say that we're now in a time when -- and I realize for some reason Brookings doesn't believe in big screens, so unless you have very good

eyes, at least probably more for symbolic purposes than anything else, but hopefully Brookings can bring itself to post them on a website for anyone who is interested in terms of looking at them.

Certainly I think these kinds of questions about what's this future of this whole private capital stuff is definitely an extremely real issue right now, given that we're seeing, you know, somewhat of a recovery in terms of volume of growth equity and buyouts, but at the same time we're seeing a lot of reluctance in terms of limited partners, some institutional investors to put money into this business, and also a real sense of saying that regulation is something that's going to matter very substantially going forward. It's particularly dramatic in terms of Europe, but we're also seeing certainly more a sense of this stuff happening in other places.

And I think one way to sort of conceptualize how things are likely to evolve in the industry is to essentially think about scenarios and say can we sort of plausibly cast out some scenarios as to how private capital -- and here I will sort of follow David's lead by sort of focusing particularly on the private equity on the sort of -- on the buyout side; they all sort of touch on some of the other areas as well -- how these are likely to evolve.

Due to the rain and the presence of senate time, I'm going to sort of truncate my life, my -- relax by a few minutes, so I think I'm only

going to really focus on three of the four scenarios, but I think there will be enough to sort lay out, you know, some of the range of things we might have.

And what I've simply done is, you know, clearly reflecting a person who's spent far too long in the world of business schools, is arranged it by a 2 x 2 matrix, saying that we can imagine one set of scenarios where this is an industry which generates quite attractive financial returns, in another where it has quite poor returns and secondly we can imagine a scenario where we have the kind of robust growth that we saw in terms of fundraising in the last few years has sustained, or another one where there is a real shrinkage taking place in terms of the industry. And these suggest, you know, different potential outcomes in terms of it.

I think the first view is one that we could just call recovery, which is certainly the view which as go-round to these private equity conferences, as I occasionally do -- you know, whenever you get one of the Titans of industry up to the podium, this is certainly the story they're pitching, and essentially the vision is really based on two propositions: One, we're in a -- this is a cyclical business where, yes, sometimes we go and overshoot somewhat, but it seems to be self-correcting in large part; and, two, at its heart, this is a business that adds a lot of value to the

companies. And if you put these together and sort of blend them, it says look, yeah, things were a little ugly the last few years, but they're going to get better.

Is this a plausible point of view? Well, I think you can certainly see some support for it in some ways. Certainly one is cyclical nature of this business, that it seems that whether we look at venture capital -- and these are just charts of the amount of venture being invested along with the IPO market -- it seems a various just sort of boom-and-bust cycle where there are certain periods where, for whatever reason, the public market goes sort of crazy and people get very enthusiastic and then lots of money gets invested, and with the benefit of hindsight, too much money gets invested. There's sort of this period of overshooting and over-frenzy, and then basically things sort of self-correct, including we see the same thing in buyouts. This is just simply looking at the deal volume, which is the black line on the bottom, which sort of totally spikes up with the ability of debt, which is basically debt, the middle line, which is debt as a multiple of earnings, and makes the point that in periods where bankers, for whatever reason, lose their minds or become excessively generous in a providing lax of debt. Evaluations go up; volume of activity goes up. One sees this enormous spike in terms of the activity that takes place.

And again, this is a sort of -- appears to be a story that has

this sort of pendulant swing kind of aspect where, you know, occasionally this is a business that goes very crazy, and it has no doubt unpleasant consequences for everyone involved, but then things seem to self-correct.

Again, you can sort of see some evidence of this if you look at the fund level, and this is trying to look at the relationship between fund size and returns for both the venture and buyout worlds and trying to control for the year the fund is raised and the mix of what it's doing and so forth. And the key fact is that you've got essentially, in a sort of an inverted U, a sort of relationship where, you know, by and large if you're really small you don't do terribly well, but if you're really big, by and large you don't do that well and that there's some sort of sweet spot in the middle. Again sort of relating it to the sort of cyclical story, this might suggest that, you know, during these sort of peak periods when all this money gets raised, it's not going to be the -- you know, funds get very large and it's not going to necessarily be those great returns, and then it sort of basically equilibrates back.

So, one piece of the argument is saying yes, there's X us, but this is a system which sort of self-corrects. This is like, you know, this sort of, you know, the ecosystem where sometimes you get too many wolves running around and then the wolves starve and you get less of them and everything sort of comes back into balance.

The other part of this argument, which would be important to emphasize is -- and here's a truly legible chart -- is that private equity actually adds value to the companies that are there. So, let me just tell this, because at least if your eyes are like mine, it's going to be difficult for most people to read, but essentially what this has is was based on a study that was done as part of our world economic forum effort, which essentially tried to look at 18 different indicators of firm performance, and it focused on things like inventory, where they sort of said, you know, I think a scale from 1 to 5 where 1 is that you basically have all your inventory sitting in a back room piled up with no real rhyme or reason; 2 and 5 where you've got everything bar-coded and it's all in some sort of Oracle database and can track what's going on with it. And, similar, the authors, with the help of McKenzie, basically developed these 18 metrics of well-managed, sort of well-managed, and not so well-managed firms. And then essentially they're all based at London School of Economics, so they sort of set up a little boiler room at OSC of master students who called up the Indian table and the Russian table, you know, calling up companies and trying to ask them along these scores; and they were quite careful about it, so, you know, they were worried that, you know, maybe the Russians would tend to be particularly depressed and negative in their answers, so they took one of the Russian students and put him on the Indian table and sort of

tried to see whether that balanced things out.

But essentially, at the end of a day, they then lined it up by who owned the companies. Perhaps a little depressingly for us on the scale for 1 through 5, dead last was government as a source of ownership in terms of the management practices. And then through various kinds of levels, all the way to the last one were the best managed, which was private equity. And this of course is not definitive you might say. Maybe they're just simply better managed because private equity picked better companies to do, but they and some other work, which I'm sure we'll get into later on, suggested there is some evidence that private equity actually makes the companies better managed as well.

So, if you take these two things -- the cyclical thing and the process of correction and this idea that there is real value added in terms of the management that's here, this might sort of give you a scenario that says we're going to see this sort of gradual recovery in terms of return, see, because basically it's hard. This is something that adds a lot of value to the firms that are there in that, you know, well, no doubt there'll be booms and busts in the past. This is basically fundamentally a business that's going to be large; it's going to generate a lot of value for the companies which are getting those investments and presumably is something that would scale into lots of other regions and places.

As I said, that's a recovery one -- the buyout Titan story and so forth, and it certainly is one that sort of fills you with a warm and fuzzy feeling.

Unfortunately, that's not the only scenario you can envision. Certainly another view you can make is saying we're going to have an industry that's going to generate a lot of returns, but it's just simply going to be considerably smaller than what we've seen in the last few years, that essentially what we've seen in this sort of real wall of money that came into private capital -- this has been alluded to before -- was in some sense a real aberration in terms of what's taken place.

Now, how would you -- why would this be a plausible item to make? The main reason is it seems this is an inherently undemocratic -- with a little "d," not a big "D" -- you know, business in terms of how well people do in it. And we can see this in a variety of different ways.

Even the most myopic person will basically get the picture of this. This is essentially the return of all venture capital funds in the United States, mature funds, and essentially lines it up from the worst to the best. At the worst is, not surprisingly, minus 100 percent; at the best is the fund which basically returned over 700 percent.

And what's clear is there's enormous skew here. and in fact, when you sort of look at the area under the curve, that first 5 percenter,

that first 10 percent is basically where almost all the goodies are in terms of returns that are there. In fact, if you would sort of look at the area under the curve from, you know, the 75th percentile, so basically the people who are better than 75 percent of the population is down to zero, that area is actually negative in terms of actually negative returns, essentially, you'd be better just keeping cash than investing in the bottom 75 percent.

You might say this is just venture capital; it doesn't really characterize the others. But buyout funds in the U.S., you know? Maybe a little less dramatic? There's isn't quite as much on the oomph, on the up? But again, an extremely skewed distribution where there's a surprisingly small number of groups that generate the bulk of returns. You might say this is just an American thing. It's not, you know -- America's this land of contrast, but if we go to Europe, which is much more about an egalitarianism with a much more balanced thing -- well, not really. It's, again, sort of a very unfair kind of game in terms of what's going on.

This is fact actually understates what's going on. It understates the nature of distribution, because essentially this is just simply looking at each fund as an independent thing, so fund 2 and fund 3 and fund 4. But there's been a variety of other work which has shown that there's actually an enormous amount of persistence in terms of the performance. In particular, Steve Kaplan, Nance Van Shore looked and

said if you're in the top third of funds -- let's say your fund 3 is in the top there, what's -- how likely is it that your next fund will be in the top third? And the answer is almost 50 percent. Similar, if you're in the bottom third, you've got almost a two-thirds chance of your next fund being in the bottom third again.

So, you've got these winners who win again and again and again; and you've got these underperformers who seem to be there again and again and again despite the fact that this seems to be actually quite predictable.

And perhaps the third area, which makes this particularly unfair, is that it's essentially -- this difference in performance also maps with the investors. So, this is some work that Antoinette and I did with one of our doctoral students. Well, we just simply lined up investments made during 1990, some mature investments. We looked at how well those investors did, and what we found is that it wasn't the case that you as the typical investor basically ended up with a random assortment of some good funds and some bad funds. Instead, some people -- and particularly the endowments, like our own institution, our Yales or Ford Foundations -- who seem to disproportionately do far better and get far more of those good funds than the others, and then there's this sort of whole world of, you know, particularly, you know, pension funds and particularly, you

know, bank affiliate funds where things are very ugly indeed in terms of the kind of level of returns.

Now, of course that's not every pension fund which is experiencing this; there are certainly some which have managed to sort of crack the code, and we could certainly talk and speculate as to why it is that some have done better than others, but it suggests that this is a very uneven playing field and certainly is not, you know, a sort of straightforward road to riches.

So this, you might say -- what we're likely to go through is at a certain point, people are going to wake up to the fact that this is an unfair game, and what we're going to see is a lot more tough questions being asked and probably in some sense, you know a lot less of an industry being there. If the industry which will be there -- the investors who will survive will probably do very well, because they'll pick sophisticated groups and so forth, but it will be a substantially reduced industry as a result.

The last scenario -- as I said, I'm only going to do three out of four, but since the last two are depressing, one depressing one is probably enough -- is this notion that we're going to see a poor return industry with a lot less money, a sort of really -- you know, this sort of nightmare scenario, at least for those within the industry that will see this

at -- I mean, with benefit of hindsight as an aberration of an industry that didn't work.

And if you want an analogy to say how can this be? Do industry asset classes disappear? The answer seems to be yes. So, for instance, among many of the institutional investors, like endowments and pensions during the 1970s, it was quite popular investing in oil and gas partnerships. But at a certain point, they woke up, you know, particularly once done by these various wildcatters. The people woke up at a point in this phenomenon, that essentially people with -- the wildcatter would drill a dozen wells and half a dozen of them would be for the partnership and being paid for the partnership and half a dozen of them would be on his own account. They would be basically there. But when they struck oil, it always seemed that it would be the well that was the wildcatter's own where the oil would come gushing out of, and for some reason the partnerships never seemed to really be able to get it, that there was sort of such -- and at a certain point a lot of the -- you know, a lot of the institutions basically said this is just a sector which has got so much in terms of agency problems -- you know, so much in terms of, you know, these sort of gensonian conflicts, that, you know, we alluded earlier, that it just doesn't really work as a sector in terms of investing, and we can't really make it right.

Well, is there an equivalent of this in the private equity world? Well, I think if we wanted to point to something, it's not hard thinking of what we would go to, but we'd sort of think about, you know, compensation, compensation schemes in the industry.

This is usually at the point where if I'm speaking to an industry gathering people start throwing things at me. But I point out that this is a study that was not done by myself; it was done by -- I like to describe this study as one which has cost Wharton several hundred million dollars in donations since the two faculty members were at Wharton -- two authors were at Wharton at the time they did it -- where they just simply tried to look very carefully at several hundred of the large partnerships that were raised during the course of the 2000s and then calculate net of expenses, what the net present value of all this stuff, all the goodies coming to the partners were, per fund.

So, essentially what they did is they said this is basically the equivalent of the flow of money -- basically the equivalent of a check that arrives in the mailbox of each partner on the day that the fund closes. It actually isn't, because of course much of the money comes later on, but they're essentially doing a discounting process to try to get at it.

And there are sort of two things to emphasize about these numbers, one of which is of course -- these are big numbers, \$32 million is

a nice number to sort of have a check arrive in one's mailbox, particularly when one thinks that during much of this period of the 2000s people were raising funds in, let's say, every 18 months or 24 months.

And the second thing is that we, as instructors -- you know, when we teach our MBA class, we're always sort of running around saying private equity is really special essentially there's this little management fee, but then you've got that big carried interest, that big profit share that gets everyone on the right page. And yet when one looks at the numbers which are here, yes, there is a significant amount of carried interest, but as a share of the pie, particularly if one adjusts it for net present value kind of purposes. We're talking about 25, 30 percent in terms of what's going on, that in a way the fee structure has grown up to be the point where you might worry considerably about the kind of incentive implications that it has.

So, again, if we want to sort of be in this sort of, you know, gloom-and-doom kind of camp, you might say well, this has been raised many times in the past, and for whatever reason investors can't seem to get it all together to really be able to address this issue.

So, again, as I said, this was sort of the depressing scenario, but it would suggest that perhaps at a certain point investors would just basically say this is too hard to do; maybe we'll try to do more of this stuff

in-house and just try to do this ourselves. But somehow this reliance on partnerships and the like is not really the way that we want to go in terms of doing it.

You know, one of the -- so, I guess this is my metaphor for this thing. We're just simply not going to jump over the cliff in terms of the process.

One of the great dangers of being an academic, of course, is that you actually occasionally have to say something and then people remember it and come back and say you said this. I always see this with our -- we just had our reunions and a couple alums were -- I had my slides from five years ago and we're like, "But you predicted this and I invested a bunch of money and look what happened instead." I was like "Look, I'm not the only one who was wrong about five years ago." So, that sort of has induced a little bit of caution in terms of where I stand.

I guess, you know -- I think you can make a plausible case for each of those three scenarios. I guess I am perhaps more of an optimist and sort of see somewhere in between scenario 1 and scenario 2 as being where truth is going to come out, and, you know, probably with a little more emphasis on scenario 2, which is to say some degree of shrinkage and reconfiguration of who's doing the investing. But, you know, I'm certainly notorious at Harvard for the number of entrepreneurial

startups that I've turned down founder stock on, so I've been wrong about a lot of things before, so I definitely would like people to take that with a small grain of salt.

So, at least that perhaps tees up some of the broader issues and some of the broader questions about the business and it's evolution, and hopefully give some food for thought as we go into the academic -- back into the academic panel.

MR. BAILY: Want to take a couple of questions or --

MR. LERNER: If anyone's got a question or two, let's do it. Otherwise, we can always revert to the Howard Business School of tradition of cold calling. Particularly, there are a couple of former students in the audience. It wouldn't be hard to do.

Yes.

SPEAKER: When you talked about the cyclicity --

MR. LERNER: -- cyclicity of business, yes.

UNIDENTIFIED #1: -- are we -- is this crisis that we are go into, is this part of the cycle?

MR. LERNER: Um-hmm.

SPEAKER: You think it's part of the cycle. I think it is the continuity that we reached.

MR. LERNER: I think this --

SPEAKER: I just want to make the point. There's a difference between being in a cycle --

MR. LERNER: Right.

SPEAKER: -- and reaching a point where there's a discontinuity, something that's happened --

MR. LERNER: Right, right.

SPEAKER: -- which makes the future different from your past, so this interrupts your cycle. You don't know where you are actually.

MR. LERNER: I think that --

SPEAKER: And that's why everybody's --

MR. LERNER: Right.

SPEAKER: -- because nobody where they are.

MR. LERNER: I think what you're getting at is exactly the crux of the matter, which is that in some sense -- you know, I think if we were sort of subscribing to the first view, you just sort of say this is sort of ebb and flow and repetition of a pattern we've seen many times before, but, on the other hand, this is sort of -- clearly the magnitude of what we saw in terms of the influx of money, even adjusted for inflation and so forth, was much larger, and clearly the magnitude of the correction was also much larger, and certainly --

SPEAKER: I want to make one point please.

MR. LERNER: Right.

SPEAKER: You see, because what I feel is that the paradigm that you use as 1980 has failed; it's collapsed.

MR. LERNER: Right.

SPEAKER: We have no paradigm now.

MR. LERNER: Um-hmm.

SPEAKER: So, we don't know what to do.

MR. LERNER: Um-hmm. So, I gather you're probably more in the third camp in that sense.

SPEAKER: So, I don't know what we're going to after your thing ends.

MR. LERNER: Right.

SPEAKER: We don't have any (inaudible), so we have to (inaudible).

MR. LERNER: Um-hmm.

SPEAKER: But it's so big for academics (inaudible).

MR. LERNER: Well, I love -- I mean, I think this is actually -- you know, nothing like a good crisis for full employment for academics, not that we were any good at anticipating it beforehand. But at least we can keep busy trying to explain what happens and trying to look in a crystal ball. But I think that -- I mean, it is a very good questions in terms of

saying, you know, to what extent can we -- you know, private capital, whether we think about venture or buyout, this is not an industry which has been around for -- you know, when people do studies of the stock market, people will -- you know, Bill Goetz and others do studies when they go back 350 years to what was the patterns on the, you know, Dutch stock exchange, and there's this enormous history we can draw on in terms of looking at the experience of public markets in many different countries and sort of over many extremely disruptive kinds of events.

This is a business which in its modern form is, at best, 30 years old, which has sort of gone through, you know, depending on how you count it, two, three cycles prior to this one. So, our real ability to sort of say we can know what the future looks like by drawing on the past is really limited, and I think as a result of the sort of tough questions that people are asking about the future of private capital, our very reasons are very reasonable ones, because we just -- you know, it's -- we're not talking something that's been well established for centuries. This is a young industry, and one can imagine in some ways that there might be real potential for changing in quite dramatic ways going forward. So, I think it's an excellent issue.

All right, my task master is looking at me and saying get off, get away.

MR. BAILY: No, I think when we get questions from the next panel, we'll maybe re-enlist you.

Well, we're very fortunate to have three very distinguished academics to tell us a little bit about what they've been doing in this area, and then take some questions if the audience is a little more responsive than it's been. I guess it was warming up on Josh.

Anyway, our first speaker is John Haltiwanger, who has done a variety of different things but is probably best known recently for his work in looking at how different firms of either different ages or sizes evolve over time and particularly the notion -- exploring the notion of Gazelles' companies that are the ones that account for a lot of employment growth and a lot of value growth.

The next speaker is Manju Puri. Manju has done a lot of work on how private equity will have venture capital, helps firms -- what's the difference between private equity or venture-backed companies and non-venture backed? She's also looked at some of the biases that are perhaps introduced by behavioral -- non sort of strict rational behavior by the managers of the firm's behavioral responses.

And, finally, Morten Sorensen, who's done a lot of work on the interaction between entrepreneurs and private equity and how innovation -- the sort of link between innovation and private equity and

how private equity affects the evolution of industries.

All right, so let me start with you, John, if you would, for about five minutes.

MR. HALTIWANGER: Great. So, thanks, Martin.

So, I am going to talk about the role of private equity -- private capital, I should say -- get the right label here for this broad agenda -- on jobs and productivity, and the way I'm going to do this is I'm first just going to talk about jobs and productivity and not at all about private capital, and I'll tell you what I think we've learned over now studying U.S. businesses over the last 20 or 30 years about jobs and productivity.

So, what's striking about the U.S., I'd say, in particular, but I'd say this is also true of other well-functioning market economies, is they're constantly reinventing themselves, and what do I mean by that? One way that I mean this is firm startups play a critical role in this reinvention process.

So, what do we see in the data particularly for the United States? We see firm startups -- when they come in, they create a lot of jobs in the first year alone. So, for example, back when things were a little bit better in 2005, firm startups created in just one year 3.5 million jobs, okay? That's a big number, okay? It turns out that our net employment growth for that year in terms of change was about 2.5 million. So,

enormous surge of jobs.

Now, you have to be a little bit careful how to interpret that number, because it turns out what happens to many of those startups, actually most of them fail, okay, so within the first five years many of them go out of business. But amongst the startups -- and this is the critical point -- amongst the startups are the most rapidly growing companies in the United States, and they, as Martin was hinting, create lots of subsequent jobs, and indeed the evidence would suggest they are amongst the most innovative and most productive companies in the United States. And so we get a huge kick in the United States, particularly in, I'll say, healthy economic times -- and I want to come to talk about less healthy times in a few minutes -- a huge kick from this ongoing dynamic.

Now, it's also the case it's a mistake to say all the action is in the startups and young small businesses. After all, actually most activities were accounted for by the large, mature businesses, and they didn't become large and mature unless at some point in the time in the past they had one of those high-growth periods.

And what we also find amongst large, mature businesses -- they need to be able to adapt and adjust, and if they don't, they're going to contract and ultimately fail as well. And so we do see a close connection between the changes that we see for large, mature businesses and

productivity. Those businesses that successfully reinvent themselves that are large, mature businesses at least stay the same size or grow. Those businesses that don't tend to shrink.

And so -- so the question is where does private capital -- or you could say more financial markets -- play a role in all of this? Well, what's hard about the process is -- I'll say the very high failure rates that are endemic in this reinvention, in this process, particularly the really high failure rates amongst the startups and the young businesses. And so the challenge for -- you could say for investors and -- but financial markets sort of more generally is to be able to try to allocate the capital to the businesses that are going to be the fast-growing businesses. And so private capital, obviously, potentially has a very large role in trying to identify that, and I think it's closely related to some of the skewed distributions that Josh was showing it. By its very nature, you're going to see a very skewed distribution, given the skewed distributions we see in terms of the profit and productivity differences across businesses, particularly amongst these startups and these young small businesses. It's the very nature of the process that you're going to see such skewness.

Now, what do we actually know in terms of hard evidence about what the role of private capital is in this scenario that I talked about for productivity in job growth? We actually don't know as much as I'd like

to at this point. I spent, I'll say, you know, countless hours -- and lots of other people -- in buried, deepened basements of U.S. Statistical Agencies developing data that allows us to Track the job and productivity growth. And we've been focusing very much on the real side of the economy. What we need to do is integrate all the financial data, all the data that people like Josh and others on the panel have helped develop.

Now, we've started doing that, and actually there was a -- there's a project that the World Economic Forum supported -- well, we brought in, in particular, what we started with -- was private equity. We didn't start so much with EC; we started with private equity. So, more the buyouts for large, mature businesses.

And we integrated a very large database, almost a comprehensive dataset of such buyouts into I'll say the universe dataset of all businesses in the United States. So, we were tracking everybody. And we essentially asked did it matter? What happened? And, obviously, this is a topic that's shown up in the press a lot and in the academic debate, and a lot of the academic debate, of course, has been, you know, somewhat related to the first *Wall Street* movie is what do they come and do, they come in and slash. Okay, and so there's employment loss.

So, one thing we looked is: Is there employment loss? And the answer is: We find actually there is some modest employment loss.

We find -- for example, over the first two years we find about a -- after loss of controls to try to distinguish -- you know, to try to make sure we're comparing apples to apples, we find about a minus 3 percent employment loss. And that's not trivial, and actually over a five-year period somewhat more, 5 or 6 percent.

The thing we actually found that was more interesting is private equity buyouts -- it's a catalyst of change, and so what we see is, you know, often these are more large, mature businesses with many different kinds of establishments and divisions. And what do we see amongst those set of establishments? What we see -- actually, much higher failure rates in terms of they shut down many more establishments, but they actually, relative to control establishments, they actually create a lot of new establishments, and so they have both higher entry rates and higher exit rates. They have higher acquisition rates and higher divestiture rates. They reinvent the companies.

Now, does it pay off? Actually, yeah, we actually have found that this creative destruction process inside these businesses yields significant productivity increase just like the process of creative destruction more generally yields productivity increases in the U.S. economy.

So, from our advantage point, there's at least some evidence that the gains here are sort of non-trivial, and then you go -- you still have

to ask yourself what are the costs? And so let me kind of bring it to closure talking a little bit about the cost of this creative destructive process.

So, I think the costs of the creative destruction process are not so much a function of whether the reinvention is induced by private capital or not; it's very much the U.S. economy functioning well. In good economic times and healthy economic times, what's remarkable about the United States is it manages this creative destruction process without enormous costs I'll say either on businesses or workers. Of course it's very costly, this very high failure rate, and workers who find themselves in such businesses that are contracting or shutting down have to find new jobs.

Again, what's remarkable about the U.S. economy in healthy times is the creative destruction process is largely synchronized, that you see workers -- actually, a reasonably large fraction of the creative destruction is workers going immediately from one job to another on what we call a job-to-job flow. We're having only a very short spell of unemployment, okay? And actually you also find a fair amount of it associated with voluntary separation, so indeed quits play a really large role in all this, so it's not there aren't layoffs in good times, but that isn't so big -- so much the problem.

The last three years a whole different story of course. Everything starts falling apart. We see a lot of destruction, not much creation. They get decoupled. What happens when destruction and creation get so decoupled? It's layoffs, not quits, long spells of unemployment. Very costly process to try to manage this reinvention process. And so when things break down, and the United States have obviously broken down in the last few years -- can I say as we look across the world, there are some countries that just managed this terribly all the time and in those countries we see lower productivity growth of not managing this process very well.

So, it is critical. I sort of say how well the U.S. economy is able to manage this creative destructive process.

And then this last thought. Obviously, the idea of private capital -- you know, the open questions are: Is the case that the private capital, particularly on sort of much on the ogre stage, on the startup and the young, small businesses, what's the roll precisely of private capital in this process that I've talked about in terms of the substantial both job and productivity growth we get out of both startups and fast-growing young businesses?

I'll stop there.

MR. BAILY: Thank you, John. Can I ask you a quick

question? You have written, if my memory serves me, about some of the benefits of recessions in terms of purging inefficiency out of the system, but it sounds like this recession you think could -- well, let me pose it as a question. Do you think this recession is different, or do you think it's going to have adverse long-term effects either on innovation or on startups or the potential fast-growing companies?

MR. HALTIWANGER: Really good question. I'll say I'm currently working on precisely that question.

Some of our push towards -- you know, and again you look at the evidence and you say okay, here's what we sort of think is going on. Coming out of the recession in the early 1980s -- can I say the U.S. did a remarkable in this creative destruction process, and so, yes, there was an enormous amount of creation -- excuse me, destruction in the deep recession in 1982, and then shortly thereafter creation took off, and you could say industry after industry -- again, I don't want to say this was painless; indeed, those of us who are old enough to remember, there was lots of pain associated with this, but industries, for example like the steel industry, reinvented themselves and reinvented themselves successfully, okay? The movement away from integrated mills to mini-mills -- it was a costly process, but that industry came surging out both in terms of I'll say growth and productivity, but this is across the board and the U.S. But

what's interesting about the current recession is we've -- again we've had the surge of destruction that you often see early in a recession, and then when a recovery starts, particularly a deep recession like the early 1980s, what was striking is once the recovery started, job creation took off. What's troubling now is, you know, if we believe the MBR Business Cycle Dating Committee, June 2009 was the trough. Job creation remains I'll say remarkably low, and hiring remains remarkably low for this stage of the recovery.

MS. PURI: Thank you.

Okay, Manju.

MS. PURI: Okay, so within private capital I'm going to speak a little bit to venture capital, and I'll focus my remarks around a few things. One, what is the importance of venture capital in new firm creation? Second, what are the kinds of companies that venture capitalists finance? Third, what is the role of venture capitalists? Then, fourth, does the organization form of the venture capitalist matter at all? And some of this sort of relates to the discussion in the first panel.

So, venture capital is generally widely thought to be very important in new firm creation. However, if you look at the census data from 1980 onwards, and you look at the number of new companies actually formed that obtained venture capital, it's quite small; in fact, it's

less than 1 percent. In fact, it's one-tenth of 1 percent. So, over that period, about .1 percent of new firms are actually funded by venture capital.

Why is venture capital then considered so important? Well, change -- look at slightly different statistics. Look at employment, and the numbers change dramatically. So, if you look in the 2000 venture capital-backed funds, they counted for something between 5 to 7 percent of employment. So, that explains why venture capital is considered important. It also suggests it's not the number of firm species financed that's important. There is something different about these firms.

This leads us to our second question, which is what are the kinds of companies that venture capitalists finance? So, one of things that you can see quite clearly just from the data is that these companies at every stage in the life cycle, whether it's at birth, whether it's at the time of VC financing, or with its exit they just have a magnitude of order just larger, just a huge scale effect, right? And it's not just successful exit as an IPO and acquisition. I think most of us would expect that Visa-backed companies would be larger. But different companies that fail, and we know and I know ten companies fail. These companies are just much larger when they fit. And so there's just something about these companies that is different, so, you know, scale at every level is one of

them.

The second thing that we find is different is -- so, this was best on the Silicon Valley, the sample of firms that we looked at while I was Stanford. We found firms who exalted the founder CEO who comes in with the idea that they're going to be true innovators, right? These firms are much more likely to take venture capital, right? And these firms also tend to be more innovative exposed, probably not surprisingly, and the question is why?

So, this brings us to the next question, and that is what is the role that venture capitalists play? And one of the things you can see is that these firms which were founded sort of with an innovative strategy and took venture capital are also much quicker to go the market. So, maybe there's a role for venture capital there. One of the roles that we explore in venture capital -- and this relates to what Sarah discussed in the first panel -- that is do VCs actually professionalize the firm, and we find some hard evidence to that effect. And so there are a number of measures that we looked at and sort of looked at a chart policy, like do you recruit, sort of in a professional manner? Look at adoption of stock option plans. Look at recruitment of professionals such as the VP of sales and marketing. For all of these we find that when one's venture capital is obtained you are much quicker to do, you know, these various measures

of professionalizations. The firms themselves agree that the VCs have helped them professionalize, and so this something we see.

Related to that is the question of corporate governance, and that is once VCs come into the firm, you know, what do they do? And so we look at -- or turn over, and we find that VC-backed firms -- they're much more likely to replace the founder CEO with an outside CEO, okay?

Now, that's presumably because you're getting a person more. It's professional. The question is, is this voluntary or involuntary? Because you could think of a founder who said yes, I'm a tech geek, I got the idea, I don't know how to really, you know, really run a company. Help me find the person. Or is it involuntary where, you know, in the right state of the world, you kick out the founder CEO and you bring in someone else, right, and so is it a hard or soft role? Is it corporate governance or a sort of support function? We find evidence of both, right? And typically, in the bad state of the world, the founder is much more likely to be replaced.

And, finally, you know, what is the role of organization form? Now, in the U.S. the predominant form of venture capital is private equity partnerships, right? And so governments around the world, when they ask how do we sponsor -- how do we generate new firm creation and what can we do with the supply of private capital? Often they say well, we have banks in every nook and corner. If we let banks do VC, would it have the

same effect?

Now, most of you would probably think well, my venture capital is slightly different. Well, regular venture capital or PP capital, and most people I spoke to said well, it's different because banks don't do the same sort of value added, right? But that begs the question why don't they? They could hire the expertise. It's an indigent's chess, as we'd say in economics. And so people do all this, so there must be a reason they're not choosing not to do this.

And so we studied bank-backed venture capital in the last couple in the U.S., and we find the patterns of investment are very, very different. They tend to be followers, not leaders. They came to invest in companies which are more likely to take debt later on.

Why do they invest this way? Well, one of the things we find is that the companies that banks invest VC in are more likely to take debt, conditional on taking debt. They're more likely to take a loan from the same bank. Think about it. As a bank, what's your main line of business? It's lending. It makes sense that you're going to do your basic business in a way that boosts your overall, you know, profile of what you're doing.

So, what does that mean? Bank-backed VC -- they play a valuable role. The relationships help. But if we think enough early-stage seed startups, right? But that may not be, you know, quite where the

incentives are, and when we start looking internationally, you know, maybe these are some of things we should consider.

MR. BAILY: Thank you. Can I ask you one question? A lot of your workers have been, as you were talking about the relation between what the venture-backed companies look like, a lot of people have a sense that this industry is not well understood, so can you give us some sense of -- do you agree with that? Do you think as you studied and then talked about this industry, do you find there's a lot of misunderstanding about it, and if so could you sort of point to some of the areas where you think policymakers or the general public don't understand well this industry?

MR. BAILY: Sir, I agree with that statement. I think there's still much to learn about this industry. I think, you know, we've made a lot of strides in the last decade or so with more and more research, and now we know more but I think there's a huge amount more to know.

What are some of the things we don't understand? Lots of things we don't understand as policymakers, so, for example, the bank-based venture capitalist paying -- the reason we thought of it is when I was at Stanford we had governments from India, etc., coming and saying should we just banks do it, and they would have these roundtable conferences and the VCs would say absolutely not, right? And the

question why, right? And it really was not very well understood. And, you know -- so, I think there are a lot of open questions, you know. The way VC funds are formed, the way they raise money, the kind of contracting -- you know, should we just take that model and exploit it overseas? Should we look at indigenously sort of what is the appropriate model given certain cultures, given certain institutions? How do we need to modify the supply of private capital to actually bolster new firm creation in these countries?

MR. BAILY: Good, thank you.

Morten.

MR. SORENSEN: Thank you.

So, I agree a lot with Manju and with John, so I think it may be useful to, at this point, take a step back and try to sort of paint an overview over the -- take stock of the where the academic research is and think about where I could go next. And to do that, I think it may be useful to tell a short story.

So, last week, last Thursday, I was moderating at the Private Equity Panel, much like the one here today, in Stockholm in Sweden, so think of the panel like the previous one, just with Swedes. And on the panel there we had a professor from HBS. We had the private equity investor, who was managing a large Swedish mid-market private equity fund. There was a CEO of a Swedish company, Securities Direct, which

is a company that has both been private held; it's been publicly traded and now it's owned by EQT, which is a large private equity fund. And there was a representative for the Swedish Metal Workers Union, recent director of research.

And I was sort of moderating the debate and I thought what was remarkable about the discussion last Thursday was that across the board on this panel here there was broad agreement that private equity was positive and it was a good thing for the company and for the Swedish economy. So, the academic was one of the co-authors of the management study that Josh mentioned, so she had -- she showed that private equity-backed firms tended to be better managed. The private equity investor was also positive about private equity, which was probably not so shocking. The CEO of the Securities Direct was very positive about his experience being a CEO with a private equity-backed company, because his view was that that instilled that sense of urgency and he was happy to have a board of directors that cared about the performance of the company to a much greater extent than what happens in -- when -- if the company was publicly traded.

And then maybe -- most -- surprisingly there was the union representative for the Swedish Metal Workers Union, who was also very positive towards private equity. So, his view was that private equity can

instill changes, but those changes are necessary to keep these Swedish companies competitive. It may result in layoffs, short term, but that Sweden has a fairly generous welfare system, so being laid off was less devastating for the Swedish employees.

So, I think that story sort of helped resonate with academic research in two different ways. First, I think it is in line with much of the statistical evidence that has been produced on the academic side. So, academic studies have shown that private equity investments are usually associated with higher growth at the industry level, and Manju has studied and I have studied the impact of venture capitalism and investors in individual companies, and it looks like there was a positive impact. It doesn't look like private equity investors are the short-term investors who buy companies and break them apart.

So, I think that there is sort of an accumulation of evidence on the academic side of the positive impact of private equity, and I think that was what came out in this panel here.

I think there's also a different question, because a much more negative view of private equity has also been painted, so they've called, like, locusts and been sort of compared to a biblical menace. And so I was asking the panel where does that negative view come from given that you are so positive about private equity, and their view was that there

were different kinds of private equity investors. So, the Swedish investors are good, because they're transparent; they work the companies; they're sort of open about the process -- whereas the German investors apparently are the bad ones, and they were pointing to the U.S. private equity investors also as some of the ones who are giving equity a bad reputation. So, that was -- that's the Swedish opinion.

And I think it sort of resonates with academic research in a second way, because I think we're at the point where we need to understand that private equity may not just be private equity. There are different models of private equity out there. Private equity interacts with the rest of the economy in terms of welfare systems, unemployment. There's been discussions about interest, deductions, and the taxation of interest deductions, incurred interest. I think there was a big governance debate where I think private equity fits into the wider eco culture of difference forms in the economy, and I think we need to understand what it is that makes private equity work for certain companies in certain circumstances, so I think the academic question now is more a question of understanding the details of how this model works and when it works and how we can sort of tweak it in ways that make it work better.

So, that's all I have.

MR. BAILY: Thank you.

Well, I'm interested to hear that story. You know, after reading the Steaglossin novels and speculating about what happened to Tiger Woods, it's sort of taken Sweden and one must have a very different perspective on Sweden than one used to. But anyway, probably totally unfair.

MR. SORENSEN: Yeah. I'm Danish. I'm not Swedish.

MR. BAILY: Okay, good, so, all right.

Bad jokes here, but anyway.

Can you give us -- there is a sense I've heard that -- and we had a meeting over in Brussels that some of the steps that are being taken by the EU are going to make it much more difficult for private equity to operate within Europe. Can you give us a little bit of perspective on that and whether you think that's justified or not?

MR. SORENSEN: I mean, I -- so, I think from the academic perspective it's difficult to say anything definitive about that. I can tell you that the Swedes didn't think that the AIFM proposal was a very good idea, neither on the labor union side nor on private equity investor side. I know there are different views of private equity investing in Europe. I know that there are some politicians that are strongly opposed to private equity instead of painting private equity with a very broad brush. I think that the discussion behind that proposal has lacked nuances. I don't know if that's

why it has been as unnuanced as it has, because it certainly doesn't reflect all the views of private equity that (inaudible) them.

MR. BAILY: Okay, let me ask -- I'll throw it out in the -- let me just ask the panel if they -- if, to the extent that they're willing -- there is a sense that this is a moment of almost crisis in the U.S. economy and that we need to do something different. Do any of you have any suggestions if you were brought to the White House or Capitol Hill and said what can we do to create more innovation, more growth, employment growth among small companies, small businesses? What would you suggest? Would it be active policies or are there regulations that are getting in the way? What would be something you might suggest looking at? Anybody want to take a crack at that?

MR. HALTIWANGER: A really hard question of course. If we had the answer to his, we'd probably be sitting at the White House or maybe not, as the case may be.

This will date me. This definitely is a million dollar question or the \$64,000 question. I'll say I don't think we know precisely what the prescription is. You know, I think amongst the open questions are, you know, to what extent have financial markets recovered in different segments, and I think that's -- I think we still don't know the answer to that question. The fact that obviously they've just passed the Small Business

Bill -- was it directed at some sense that one segment of, in terms of banks, were sort of playing a critical role. And I think today we're hearing a bit about, you know, are we seeing, as Josh sort of talked about, what's the nature the recovery in private capital? I think that that plays a sort of a critical role. Again, I'll sort of say, somewhat related to your question but related to the overall discussion here, you know, I think different components. Hopefully, it's -- it should be obvious. The different of private capital play a very different role for different types of firms, all right? So -- and so, you know, I'd sort of say the angel financing and the VC. You know, that's in this startup and young firm dynamic, and I think the role they're playing is, you could say, is hoping to find the gazelles, okay? And are they good at that? And I would say the evidence at least has suggested that historically they were, and to the extent that that part of the market has taken a hit and we're not doing very well in that, that's -- you know, what can we do to get that market to recover.

So, back to your question. In terms of the large, mature businesses -- and I don't think it's -- there I don't think the thing is to -- is necessarily the -- quite the same role at all. There are large, mature businesses, and this is -- and I don't say -- I don't want to say the private equity is the only possible source -- that need to be changed, okay? They need to reinvent themselves. And I'm going to say we see businesses.

It's not as though the only businesses that we reinvent themselves that re large and mature had PE backing, but we say it's more likely amongst PE-backed firms. And, again, that sort of plays a critical role.

Now, back to your really hard question, do I think it's all financial markets? No, actually I think -- you know, again when I look at the data and I see this just really anemic job creation and hiring -- and I'll say businesses that look like they're sitting on the sidelines relative to what we've seen in the past -- I guess I think uncertainty is just -- is still playing a very large role, and this has come up here in a couple different ways. We're in a position where we don't what the future's going to look like. We don't know what the future's going to look like in terms of financial markets. We don't know what they're going to look like in terms of tax rates. We don't know what they're going to look like in terms of regulation. We don't know what they're going to look like in terms of where we think the U.S. economy is going to be at the cutting edge. All those things have come up today. And so I think uncertainty remains enormously high. The question is can the government reduce that uncertainty? In some cases I think yes and others no.

MR. BAILY: Anyone else want to -- do you want to add a comment?

MS. PURI: I think there's a -- the short-term response and

there's the long-term response, and I think a lot has been said about the supply of private capital, right? If we really want innovation or more entrepreneurship, we also need to look at the supply of entrepreneurs, right? And I think we need to do a lot more research in that area, right? If we believe entrepreneurs are born or created or what is it that -- you know, should we be doing things other than the education system or otherwise to expose young people earlier on to actually be encouraged to do this? I mean, through either -- we have things like P for E programs, through, you know, entrepreneurship earlier through seed money or other things. We don't know the answer to that, but that's another sort of black box I think we need to --

MR. BAILY: A lot of the people that started Silicon Valley companies came from Asia -- India, China, other places. Do you see that having changed, that we don't have the same influx or lightly influx that would affect the ability of Silicon Valley or the U.S. to be entrepreneurial or innovative?

MS. PURI: I think at the current moment, yes, because, you know, just given the state of the economy, India's -- it's a bit more resilient at this point than we are here. But I must say, all these Asian, India, Chinese Taiwanese entrepreneurs coming and then going back to their home country made a huge difference to those home countries. I mean, it

jumpstarted entrepreneurship there --

MR. BAILY: Absolutely.

MS. PURI: Right? And so there is this whole cycle when we think of this more broadly, you know, so it's -- the supply of private capital, but there are these other things that go with that. Do we want formal capital, informal capital, local capital? You know, where should we be going. I think they're all open questions.

MR. BAILY: Do you want to add anything, or shall we -- okay, let's open it up for questions, and let me invite Josh to come and join -- we've got a spare seat here for you, Josh. Come and throw your comments in. Okay.

Well, you had a long question before, so let me go to the person behind you.

Yes.

MR. STEAD: My name is Robert Stead. I'm with Institutional Shareholder Services. We started to -- the previous panel started to touch on the debate about why the surge in, you know, private equity between just some people saying, well, people chasing deals, chasing returns, which a Josh said sometimes maybe was misguided. But others said well, to no wonder, you know, companies want to stay private with the Sarbanes-Oxley regulations. You know, who wants to go public,

who wants to stay public? Is there any research on that yet? It seems mainly anecdotal so far.

MR. BAILY: Got a response, Morten?

MR. SORENSEN: Oh, the short answer is no. There is no research on this. I think a longer answer is that I think that changes in the way we think about governance of companies, and there -- I think private equity and publicly traded are different governance forms and there are other governance forms out there. I think -- and this also probably relates to the Swedish experience, and I think that there's a sort of a realization now that the public-traded company may not be as efficient a governance form as we have thought previously, so there's been massive failures of publicly traded companies, and I think we're looking for alternatives, and that may be private equity owned; it may be privately held. There may be other governance forms out there that can substitute for the traditional ones. And I think we need to understand how has the world changed and which companies are better governed in one way or another.

MR. LERNER: I think the other area of research, which there's been a little bit of work on but not really that much has been in terms of understanding the decision processes of institutional investors, and I think, you know, those of us who have spent time either in the state pension fund world here in the U.S. or in the wonderful world of sovereign

wealth funds -- you know, if seeing behavior where it sometimes seems the decisions are being made that are being influenced by a number of considerations but which extend beyond simply the rational profit maximizing kind of decision making, and I think it's fair to say that our real understanding of how institutions make decisions, particular when it comes to decisions as irrevocable as committing money to tenure partnerships is really at a very early stage, but it's hard not to feel that some of the perspectives that been developed by financial economists in terms of behavioral distortions, in terms of individual investors -- you know, there's been lots of studies of people with their day-trading accounts and how they'll chase winners and, you know, refuse to sell losers and all this sort of bizarre behavior that it's hard not to feel that a little bit of that behavioral stuff can creep into the world of private investing as well.

MR. BAILY: There was a question at the back.

SPEAKER: I'm a student intern from (inaudible) Bank. I have a question regarding my checkup list. When new startups get funds from -- getting fund from venture capitalists it comes with lot of expectations and which puts lot of pressure with the new startups in terms of being corporate governance, of professionalism, which puts lots of pressure in the new startups. So, which is some reasons that startups fail

in the early stage, and there are lot of (inaudible) was very reluctant to pick VC as an option for funding. So, what is your solution for new entrepreneurs who are seeking VCs?

MS. PURI: This is why a new one shouldn't take venture capital, right? And that is that certain kinds of companies are better off taking venture capital, and there are some who are better not taking it, right? And this is why you do see distinct profiles, right, that the kind of companies taking venture capital, you know, companies with an ex-anti and a (inaudible) strategy for example, the ones more likely to do this. Presumably they're willing to bear the cost, right, of tied to corporate governance and the others, and those who are not, you know, should not. And this is why VC financing is only a very small portion of overall (inaudible) financing.

MR. HALTIWANGER: I'm going to argue with Manju a little. Manju, Morten, and myself have all been guilty of writing papers which argue that there's a relationship between venture capital and innovation. I guess our papers are distinguished by their degree of incomprehensibility, but I -- we all sort of -- I think all papers are sort of on message that there does seem to be a relationship between venture and innovative activities. That being said, I think there are some good questions, and I think, you know, there's clearly anecdotes of VCs pushing things in, you know,

directions which weren't the best, but I think the really big issue was the one that, you know, Damon raised earlier in the discussion before where it seems that in a lot of ways if you look at the history of the venture capital industry over the last three decades, it's gone from funding companies in a very wide range of technologies to one where it's sort of a laser-like focus on a few areas. In particular, there are a few -- there are -- you know, in the area like clean energy is an area that until, you know six or seven years ago was essentially being essentially almost totally ignored by the venture community. And I guess it's an interesting question, say, even though there's clearly an enormous need for yet another site to download video games onto our cell phones whether the venture system in all its venture beauty is really addressing the full spectrum of technological needs that society has. And I guess that's just a big open issue that deserves some more thought as well.

MR. BAILY: Sarah, yeah.

SARAH: Thank you. Picking up on the prior question, Josh, your comments about the behavior of LPs. It seems to me that we've inherited this -- call it asset class or not that has this 5-year (inaudible) 10-year structure, and I'm just sort of curious. Has any academic research been done, or what is the state of academic research about whether this model that we sort of inherited from 30 years ago really is the right model

to have the best, most efficient allocation of capital from institutional investors to fund managers, because so much of this discussion is about the deployment from fund managers to the companies and -- I mean, would you still this persistence of returns and this dispersion if it were a different model and it would it still fund companies in a positive way?

MR. LERNER: Well, I think if we want to end on a note indicating that there's a lot of research to be done, we couldn't have had a better question, because I think that it's certainly I think fair to say that we know very little -- I mean, in some sense you can think back to -- you know, this is something that David Rubenstein's always fond of pointing out, that that 2 and 20 relationship, you know, sort of goes back to at least the Venetian shipping contracts or the, you know, of the 14th century. There's a lot of stuff that's sort of in there that's sort of been there because it's always been the way it way, and it's not always clear that, you know, in some sense even though venture people and private equity people are about funding change and innovation, this has been an industry that in one sense has been remarkable in the sense that it pretty much has taken things as given, and we know very little about how it might be changed, but I think it's an enormous research area that would reward a lot of attention.

MR. BAILY: On that note, I think we have run out of time, so

I'd like to thank the panel very much, and thank you, the audience for being with us, and we look forward to further events.

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## CERTIFICATE OF NOTARY PUBLIC

I, Carleton J. Anderson, III do hereby certify that the forgoing electronic file when originally transmitted was reduced to text at my direction; that said transcript is a true record of the proceedings therein referenced; that I am neither counsel for, related to, nor employed by any of the parties to the action in which these proceedings were taken; and, furthermore, that I am neither a relative or employee of any attorney or counsel employed by the parties hereto, nor financially or otherwise interested in the outcome of this action.

/s/Carleton J. Anderson, III

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