



CROSSROADS
CULTURAL CENTER

Human capital

A 4-lecture series presenting a new vision in economy beyond market, models and ethics

Work and the person: toward a new education

Human capital and the role of trust

Human capital in Pope Benedict XVI's latest encyclical
Love in Truth (Caritas in Veritate)

Human capital at work: case studies



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Human Capital: A new vision in economy beyond markets, models, or ethics

Introduction¹

As the title suggests, the aim of this series is to look at the many ways in which the "human factor" affects the economic sphere. To some extent, there is a tendency in our culture to think of the economy as a fairly impersonal process that can be understood in "scientific" terms. Accordingly, public policy often faces economic questions like engineering problems, to be solved using appropriate fiscal, monetary or regulatory instruments. Similarly, economic debate in the academia and in the media focuses on topics such as the role of the market, or mathematical modeling, or even the need for ethical guidelines, but mostly in a manner that is fairly abstract and removed from concrete human experience.

In our opinion, all these approaches, while certainly useful, are not enough. Economic processes cannot be understood in separation from the reality of the people who work and produce. Ultimately, all economic systems reflect the desires, talents and skills of the people who participate in them. Human beings are not ants, and economic construction is not a mechanical process, but a truly human event which involves reason and freedom at every step. This is why we titled our lecture series "Human capital: a new vision in economy beyond market, models or ethics."

It is interesting how this reality has come up both in the recent Papal Encyclical and also in the work of the 2009 winners of the Nobel Prize in Economics. For instance, no advanced economy could operate without a complex network of human relationships based on trust and shared ethical values, or without a critical mass of people willing to risk entrepreneurial initiatives that to some extent go beyond their short term individual interest. In fact, all economic growth originates in one way or another from human desire, and not simply desire for individual enrichment, but above all desire to build, to humanize the world. Economics has a deep cultural dimension, which nowadays is often ignored.

¹ This booklet is a collection of transcripts from a 4-lecture seminar titled "Human Capital: A new vision in economy beyond markets, models, and ethics" organized by Crossroads Cultural Center in collaboration with the Christian Business Fellowship. The seminar took place four consecutive weeks in November 2009 at the Columbia University Business School.

This technocratic and mechanistic reduction can be seen also in the way the words in our title, "Human Capital," are often understood to mean simply an educated workforce, where in turn the word "educated" means little more than "trained." However, the true human capital of a society involves all the creativity and the aspirations of its members, the richness of its social networks (including family life), its traditions of workmanship and entrepreneurship.

The first lecture is titled "Work and the person: toward a new education." The speaker is a representative of a unique economic reality, entirely built on the concept that economic life finds its roots in the reality of the human person. Bernhard Scholz is the President of Compagnia delle Opere (Companionship of Works), certainly one of the largest business networks in the world with a membership of over 35,000 businesses. Based in Milan, Italy, the Compagnia delle Opere is a striking example of a savvy business organization which at the same time recognizes that economic profit cannot be an end in itself but must be at the service of a larger human vocation and of a shared ideal.

In our second lecture, Professor Seth Freeman will focus on the role of trust in economic relationships. Professor Freeman dedicated many years to studying this aspect of human behavior which received a lot of attention from the 2009 Nobel Prize winners in economy.

At our third meeting, Dr. Kimberly Shankman, Dean of the Benedictine College in Atchison, Kansas, will present those issues of the latest Papal encyclical, *Caritas in Veritate*, which more directly deal with economy and finance, i.e., those aspects which are the least known or the most easily misunderstood by the larger public.

Finally, our last lecture with portfolio manager, Mr. Anujeet Sareen, will be dedicated to showing some case studies which will help to illustrate how, when human capital is taken into due account, the economic and financial results of businesses are surprisingly improved.

Work and the person: Toward a new education

Bernhard Scholz²

The theme that will be covered in this lecture series represents a great challenge: Human capital is the real resource to build a better future, a more human future and to begin development that will include other peoples.

But what is this “human capital”? It is often wrongly defined as all the people who work inside a company or within a nation, a new translation of "human resources," as the counterpart of financial capital. Instead, I would define the term “human capital” as the set of knowledge, skills and abilities acquired, and those still incompletely expressed or even those that have not been discovered yet, during the life of an individual who seeks to achieve social and economic goals.

The term "capital" was introduced to show the measurability and effects which these skills do or do not generate in the impact with the social and economic life of a nation or of an economic sector. There are many studies, especially of a statistical nature, which detect the relationship between innovation and productivity on one side and the different school systems and universities on the other, in order to give us a quantitative and qualitative measure of the impact of education and teaching on economic and social life.

This evening I would like to share with you my reflections, not so much on the measurability of "human capital," but on the conditions which allow the person to acquire knowledge and skills for his or her constant growth, focusing on working life. Work itself is a significant source for the acquisition of knowledge and skills, so much so that companies and institutions can promote or hinder such growth. In this context, we also have the opportunity to focus more on some issues that concern more generally the relationship between the person and the organization.

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1. Desire and Work

A worker's knowledge and skills are generated, acquired and transmitted mainly by people. It is not mechanical; it is instead a consequence of a relationship which a person freely establishes with the environment in which he or she lives. In light of this, we can only start from what drives a person to face his or her life and work. As we know, there are many theories about what motivates people to work, and I think that this issue must be addressed boldly from its origin. We need to go to the root of different motivations and give value to the real point: we are talking about the deepest desire of each person to conquer happiness and then to make this happiness complete and lasting. Monsignor Luigi Giussani, to whom not only the Movement of Communion and Liberation but also the Company of Works owes its existence, has made this "desiderium" which the great philosophical and theological traditions have spoken of as the essence of "umanum," something which is possible and present. It is evident that the desire for fullness of life by its nature pushes one to a search for the infinite and finds its ultimate expression in what Monsignor Giussani calls the "religious sense."

But while the idea is widespread that everything that is about religion, or the search for the ultimate meaning of life, takes you out of reality and away from the nature of life itself, the truth is that this same desire which leads us, introduces us to reality in order to transform it to make it more suited to the ultimate demands inscribed in our nature.

Desire is like the spark that ignites the motor. Every human action is born from this phenomenon, from this dynamism that is inherent to man. Desire ignites the human motor. So as one sets himself to the task of finding bread and water, finding work, looking for a wife, finding a more comfortable armchair and a better home, he becomes interested in why some have a lot and others have nothing, why some are treated fairly and he isn't, right to the point of enlarging, expanding and changing himself and these stimuli that he has inside and that the Bible globally calls "heart."

If we stand in front of the daily challenges of ordinary life, which often bring out a contradictory meaning to our needs and talents, it is precisely within this normality that desire begins to search for a meaning that can give a sense to everything, not to avoid it but to catch it in its truth and its fullness and put it at the service of humanity and its action.

I am not here to expound on the concept of the religious sense, but I had to mention it to highlight that the commitment to work in the human being is generated from a deep source that somehow defines man himself. First of all, it is the noblest expression of the person, which seeks to realize itself in the desire to turn reality into a home that is more

human, to serve the people entrusted to him and to make himself available to the common good.

Processing, service, creation of assets: these and many similar formulations indicate how man's desire to become more human, to become more himself, pass through a work commitment. Then it is clear that this desire is the source of the learning process that leads to competence, to curiosity that leads to knowledge, to every need that leads to work, and every opening that tries to meet the meaning of work and life.

2. Work and Education

Whoever works is obliged to look at the reality of things, to understand customer needs, user needs, the operation of a machine, the logic of a process, the market rules, the balance rules and so many other things. The work, whatever it is, is in itself an invitation to continually improve on one's set of knowledge and skills. This dynamic, as we have said, is supported by the human desire for one condition: that the person recognizes the specific work one has to do as an opportunity through which this desire marks its journey. Then everything becomes an opportunity for learning, and work itself becomes education; that is, people come to know themselves and the world around them better.

The great French entrepreneur Francois Michelin wrote: "I worked in a factory for fifty years and I am very glad I did, because the difficulties we all run into are the greatest way we have to be educated. Often you can get more profit from a failure than from a success, because when you get positive results you run the risk of "mirroring" yourself without analyzing anything, while if you fail you are forced to pay attention to reality and learn from it." He added: "If you forget the purpose of what you are doing, your business will always be unpleasant." (*Atlantide* 13 to 1 / 2008)

Many now perceive work as something inevitable to put up with, or, at the other extreme, full of stimuli as a substitute to fill up time. This latter approach work well if all goes well, but leads directly to depression if something goes wrong. In both cases, however, work is not an expression of a genuine desire, but of an alienation that is imposed in the first case and of an exhausted search in the second. We have seen past ages during which the working conditions were objectively alienating for the inhuman violence which characterized them. But today, in industrialized countries, often there is still a form of voluntary alienation.

The financial crisis with its consequent distance of finance from the real economy and its idolatry of profit maximization is caused by the betrayal of this desire. The building of

goods by means of labor was replaced by an instinctive “I want it now” through sophisticated financial transactions.

This recent dynamic shows that desire becomes an ideal tension and does not shape the work of man automatically. A person's freedom is and remains the key factor that asks us to decide if we want or do not want to remain faithful to ourselves and to the original impetus which we discover within ourselves and which ties us to the world. In this sense, the crisis that we now live is, like all crises, a great opportunity to learn from our experience and to stand in front of our own human nature, which does not wish for profit that will vanish, but for real and durable goods, services truly dedicated to the person, and to have the opportunity to create something really useful for everyone.

A human being's freedom is hardly moved by a moral or ethical appeal. It moves if it recognizes that within reality there is a possibility of greater satisfaction, which, unlike the pleasure that ends immediately, remains and becomes a source of further commitments and developments. The criteria of truth and charity are present in us and are waiting to be called out to manifest themselves through the relationship with the real. The more one's human desire is driven to acknowledge reality, the more one's knowledge and skills will grow properly through having the experience of real satisfaction. Whoever is sincere and honest with himself will discover that happiness cannot consist solely in the accomplishment of a job, but he also discovers that without work which respects reality, it is difficult to get to know oneself and to find one's way to such happiness. Living in reality is the first education, and that is why work is a real education, which promotes the training and growth of every kind of knowledge.

3. Work and the Organization

Now I would like to make a few remarks on the majority of people who enter the world of work in different companies with their desire and their original needs. They work in banks, hospitals, schools, universities, government offices, as well as those dedicated to a job who are not paid, like the thousands of mothers with children, grandparents with grandchildren, and the army of volunteers working without a salary. It is inside and within these organizations, large and small, public and private, for profit or non-profit, that they follow this desire, trying to compare themselves with reality by understanding customers and markets, exploring new products or new services, generating new knowledge and technologies, taking care of the sick, helping those in need, and using finance and profit or the sponsors as an instrument for achieving their goals.

In all of these organizations, no one can "do it on his own," but each can make a contribution according to one's skills and personal knowledge. In addition, personal skills take real effect if they are combined with social skills such as communication, leadership, the capacity to delegate. One can wonder: "How is it possible to really express one's abilities, to really follow one's desire, through a participation that only "makes a contribution" without, instead, making a "complete" work? The answer to this question can only be in a true and loyal involvement by the individual within the organization.

The first condition which gives dignity to every person's job and to each employee is the clear and transparent statement of common goals and principles which support and define their many responsibilities. It is only when I know the content of my work and the common purpose to which I am devoting myself that my work acquires a real value and allows me to establish a relationship of trust between myself and other employees. Also, the opportunity to serve in a great "cooperation" becomes a true appreciation of your own person. Something much deeper is reflected in this experience: if we look at human life as a whole, we realize that everyone has collaborated in the great history of the world, and that all that they need comes about through a cooperation, without which none of us would even have food and clothing. We live in a large network which only an ideological individualism has been able to reduce to an isolation which seeks the other person just for a few fleeting needs but not for a real sharing.

This is so true that every organization is not a reality separated from others with many procedures and anonymous activities but is first of all, as Pope John Paul II said, a community of men.

This brief reflection allows us to introduce a decisive consideration: "The contribution toward" versus "to make it on my own" is not something less in the end and does not prevent a full expression (a total fulfillment) of our own desire. Whoever is giving what he can for the creation of something bigger than himself lives within his own work the elementary human condition.

By itself, the relationship between a person and an organization finds its form in a legal contract which defines the rights and obligations of both parties. But after what we have said, we understand that the contract does not exhaust the employment relationship. What gives meaning to the employment relationship is instead a kind of "alliance" for a certain period of time between one who offers his skills on the one hand, and one who represents the purposes of the organization on the other. To conceive the partnership as an "alliance" strengthens the trust in a realistic way, because it makes transparent the "why" and "where" of the commitment of each one and indicates the content of the reciprocity in a transparent manner, thus avoiding undeclared interests or secondary

purposes. The “alliance” is a mature condition made of circumstances and strong intentions, and not made from alienating statements.

This dynamic also has the task of recalling organizations to be faithful to their purpose at the service of something beyond themselves: the enterprise of customer services, the hospital serving the sick, the school serving the students, the public offices serving the citizens; all targets to benefit the users will also encourage a good sense of the work. The seriousness of such an approach also reveals the link between each organization and the common good. The desire at the origin of the motivation finds a horizon in which the welfare of the person, the success of the organization and the common good come together and become a unity of expression.

4. Responsibility

One of the most debated themes in the relationship between person and organization is and always will be the motivation. How can I motivate my colleagues and collaborators is one of the most common questions posed by the leaders of a company.

If the true motivation for the work is human desire, as we said, then the motivation can only arise within the person and cannot be introduced from outside. Therefore, it is not in anyone's power to create an adequate motivation for another person. Despite this, we constantly try new techniques to produce emotions in the person, trying to inspire "positive" feelings for a greater commitment. Experience teaches us that these techniques, which sometimes border on manipulation, are almost always insufficient and their effects are short in duration.

We can adopt two opposing ways to affect the motivation of another: to destroy or limit the motivations through behaviors which undermine his trust or sense of justice, or to create conditions which support, guide, encourage, strengthen and correct the reasons which he carries within himself as an expression of his human desire.

As we said, the basic requirement is the clear and transparent communication of the general objectives and specific aims of the work. But we need to add something essential: it is necessary to give the reasons, stating the reasons chosen for these goals, these strategies and these actions.

In this way the person has the opportunity to assume a specific responsibility that allows him to "respond" to something that he may know and understand, and in front of which he might, in full awareness, risk himself and his talent. In this way, accountability becomes a true appreciation of the person and of his abilities and consequently fits with

true dignity in the overall work process, and thus his desire can be expressed in an authentic way. Knowing the reasons behind the goals, strategies and actions of each employee offers the possibility of developing several new proposals, even more appropriate to the challenges in workplaces. Consequently we open a constructive dialogue that refers not to power plays or impressions, but to a continuous confrontation with facts, data and results suggested by reality itself.

The person, pushed by his own desire, will face reality for what it is through his responsibilities, with a tension toward real knowledge and the continuous improvement of his skills.

To give you just a hint of how desire also impacts the decision process based on knowledge of reality, the vast amount of information available does not become by definition a set of knowledge for us which is aware of itself, but it becomes so only if the meaning which man alone can give it is expressed. I can have an excess of information about my company, my customers, new markets, problems and new technologies. But all this becomes knowledge only when I can give a meaning to this information, an opinion which gives it a value and opens it to possible interventions and actions.

Information about the different possibilities for investing my profit becomes knowledge if I know the consequences of these investments and have the possibility to assign a value to the various options. There is no important choice that does not imply, sooner or later, the basic criteria of my human desire and the virtues to bring that choice to completion. The desire is not only a source of a "pushing or dragging" but is also the source of a judgment which directly or indirectly affects our decisions as well as the economic and organizational issues.

Putting people in front of reality and asking them to take responsibility is therefore the greatest value that can be done in the world of work. It is about giving value to the entrepreneurial skills which reside within each of us as an expression of our desire. And that is why Benedict XVI wrote in his encyclical *Caritas in Veritate* that "Business activity has a human significance, prior to its professional one," and he continues, referring to *Laborem Exercens*, "It is present in all work, understood as a personal action, an *actus personae*," which is why every worker should have the chance to make his contribution knowing that in some way "he is working 'for himself'." It is not a coincidence that Paul VI, as noted in the Encyclical, taught that "every worker is a creator."

So responsibility is a prerequisite for a person to make a real experience of self, to truly know himself. Only those who respond with their whole being can know themselves.

It is important to remember in this context that within any organization, the transition from a reduced motivation or narrow reasons to a more authentic and strong motivation, or the transition from a reduced desire to one with greater clarity about its real needs, occurs very often with colleagues who testify in a convincing way that there is a way of working which unites human desire and the challenge of efficient work through real responsibility.

In the "community of people" within an organization there are some dynamics of witness and reciprocity that act virtuously in supporting the responsibility without replacing it and are worth as much as good leadership. In this way we can also say more generally that a culture of responsibility, even at the level of civil society, strengthens a true sociability, making people more supportive. And on the other side, a real sociability, as the encyclical *Caritas in Veritate* puts forth, also promotes approaches where responsibility takes place. Only if there is real responsibility can a solidarity worthy of the name take place. Otherwise we fall into the traps of paternalism and welfare dependency which organize people's lives and presume to define their own good regardless of their freedom.

You may ask: So the retribution systems, the incentives, the premiums do not have a role in improving economic motivation in organizations? To address this issue we should open another category of reflection. But surely we can only mention that once guaranteed a fair wage (and even here we have a lot to discuss ... "fair" as compared with what?), no form of economic incentive will ever replace a conscious and appropriate orientation of work towards goals, a true partnership and a work experience rooted in human desire; it can only act effectively as a lever of support, as a practical or symbolic expression, measured in a small space of time.

To clearly indicate their common goals and give the reasons, to assign the final goals of a single action as a responsibility and not just as a task, to highlight the talents of each one and other managerial "missions" remain irreplaceable for the person's involvement in an organization so that it is full of dignity. Now everyone is talking about the "centrality of the person" within enterprises and institutions, but only a few realize that this centrality is not generic but encompasses every single person in his or her uniqueness. It concerns the person who "offers the work" and the person who "does the work," and concerns intellectual and manual work, as well as routine and creative work.

Conclusion

I have tried to make clear how work which starts from responsibility becomes an education, an edification of the person and a help in creating a more human society. In

this context, we have addressed questions of a fascinating world that is opened up and often can be surprising in its beauty in allowing us to live our desire, the desire for a fullness of life. These questions are simple, so simple that they are continually overlooked and neglected despite their inevitability and power.

But when we stop for a moment to observe ourselves in action and look at ourselves while we are working, then we discover that all is gift, all is given, that everything that we have is entrusted to our responsibility. In this way, work leads us back to the same source from which it is born, that great desire which finds its most fulfilled form in the religious sense.

Therefore, all the answers to the big and simple questions that life presents us with must be verified by our daily work. Christian faith that purports to be answered as true, authentic and abundant in the religious sense tells us that our talents were given to us by the Creator himself inside the circumstances, to realize ourselves and give glory to He who entrusted them to us. In this sense, "human capital" is no more than an expression of a gift received, accepted and developed responsibly for the good of the people entrusted to us and for the common good. We therefore have the opportunity - if we want - to verify the truth of this proposal that is for everyone in every situation, at every moment of life.

Human Capital and the role of trust

Seth Freeman³

What I want to do to start is to ask a very simple question: Where does prosperity come from? And let me make that a very human question by telling you a story of a woman by the name of Suffia Begham. She was a very poor woman living on the fringes of Bangladesh in a town called Jobra. She was the mother and sole caretaker of three children. She lived in a small hut, and she was barely eking out a living making bamboo stools. She was actually very good at doing this, and she sold whatever she produced, but she was not really making it. The reason is she simply could not get enough bamboo. She simply didn't have any money to purchase more bamboo, and the only hope that she had of getting that money was to go to the awful, awful money lenders who preyed on people like her. Now the banks simply would not even consider lending to someone of her sort because she was illiterate. She simply could not read or sign a legal contract. She simply had no money or wealth of any kind that she could put up as collateral, and she had none of the right connections that might permit her to get the voucher of someone the bank respected, and so she was really stuck. In essence, what she was struggling with was not a lack of wisdom or initiative or knowledge; she was struggling with the lack of trust. She simply did not have the trust of people who could be counted on to lend her the money that she needed.

Her problem is not unique to her. Her problem is the problem faced by millions, hundreds of millions, arguably even billions of people around the world, in a two-thirds world that even I usually don't know much about. And if we can't help her, if we can't help the hundreds of millions of Suffia Begham's around the world like her, then we really haven't got much of an answer to the question: Where does prosperity come from and how do we realize it? So for her sake as well as for our own, I'd like to start hunting for some good answers.

Our first stop in that search is the current understanding of economics as presented by neoclassical microeconomic theory. And so, what I'd like to do to get into that is to play a game with you. It's called *The Ultimatum Game*. I think you'll enjoy it. It's very quick and it's very fun. In order to play I'd like to start—this is just the set up, I'd like you to turn to someone sitting next to you and greet each other with your first name. "Hi, I'm Bob." "Hi, I'm Steve." That kind of thing. So go ahead. [People greet each other.] Okay,

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well done. We're rolling. So of the two of you, if your name comes first alphabetically, I'd like you to be Player A, and if your name comes second alphabetically, you're going to be Player B. So for example, Alan, you're Player A; Won Chi, you're Player B. Okay? So I'm going to give your pair the chance to win and divide ten thousand imaginary dollars. Let me emphasize the word *imaginary*! Player A, in a moment I want you to propose a division of the ten thousand dollars to Player B. She would get this much, and you would get the rest. Okay? Now Player B, you can either say, "Okay, I accept." Or "No deal." And if you accept, if you say "okay," you'll get the amount that Player A offered, and Player A will keep the rest. But if you say, "No deal," neither of you gets anything. Now here's the thing: there's no negotiating, no discussion, there's no anything. It's just offer, accept. It's as simple as that, straight, no discussion. It should be done in thirty seconds. Okay? So go for it. See what happens. [Players exchange offer/acceptance]

Let me just check and see what happened here. First, how many here reached an agreement? Raise your hands. Okay. How many here did not reach an agreement? Raise your hands. Okay, stay tuned now. If you reached an agreement, how many of you here who DID reach an agreement, agreed to a 50/50 split or something really close to it? Raise your hand. Okay. Who agreed to something very different from the 50/50 split? Okay, just a couple of us. All right, let me speak now to those of you who did not reach an agreement. Raise your hands. Okay. Now, [speaking to player] which side were you on? A, and who was your B? What were you offered? \$4,999.00 and you said "no"? Why did you do that? It was almost, but that wasn't enough? What would have been enough? You wanted exactly half. I'm going to come back to you. Who else? Player B, what did she offer you? \$3,000.00. And you said no? Why? It's not fair? Let me get this straight. You're going to go home tonight, and a loved one is going to ask you, "What happened at that Columbia talk tonight?" And you're going to say, "Somebody offered me \$3,000.00." And she's going to say, "Really? What did you say?" And you're going to reply, "I laughed in her face." And your loved one is going to say, "Well, what did you get instead?" And you're going to reply, "Nothing." And she's going to say, "What are they teaching you at this Columbia program? You had a choice between \$3,000.00 and nothing, and you walked away!" Why? Is it fairness? So say you? Is this the reason? One dollar and that wasn't enough? Am I getting this right?

Let me talk to the ones who reached an agreement, 50/50. If you are Player A who offered 50/50 and got a deal, raise your hand. Ma'am, why did offer 50/50? You didn't know what it was for and you wanted to split it equally. Why offer him so much? Wouldn't he be just as content to get 100 bucks? 100 is better than nothing, right? You're going to be generous with imaginary money, but with real...

Sir, you're a Player A and you offered 50/50? Why did you do that? Why not offer him 100 bucks? Why would he be likely to say "no" to 100 bucks? 100 is better than he started with, right? You think there's an intuitive sense of justice? You lost a lot of money here! Is this the way you guys were thinking? What's wrong with you people?

Those of you who went 50/50 gave away a lot of money. And those of you who walked away lost thousands of dollars.

I speak from a certain experience. I'm trained in economics, and I've taught it at the graduate level, and I can tell you that what has just happened here is that we have a room full of irrational people. By definition, economics would say that you have been irrational. Economics says that you are rational if you maximize your material wealth, and you didn't do that. You either took zero or you gave away half the store! And what's the problem here? I'll tell you what the problem is—it's not you. It's the theory. What you've just done is dramatize a fundamental flaw in economic theory. Economics simply cannot make sense of something you've known since you were an infant and which you've dramatized very well right now, and that is we don't just care about maximizing our material wealth. We care about other things too. We care, among other things, about justice and fairness, and when we perceive that we are being treated with disrespect, with unfairness, with injustice, it doesn't necessarily matter how much wealth materially we're being offered, we will walk away. Now that's irrational if you buy the definition of rationality that economics has been selling for a couple hundred years now. But there's nothing irrational in the more general sense. You are perfectly logical, wise, bright, capable people. What's really lacking is the theory's ability to understand human nature. And that I suggest is the starting point for suspecting that economics as a presently used practice has a fundamental flaw at its center, that at its heart, economics simply does not understand something. It has a fundamental pretense that is simply provably wrong, that the main way that we make our decisions is by maximizing our material wealth, and that's simply not the case.

But let me now tell you another game to dramatize another problem with economic theory. I'm not going to ask you play this game; I'm just going to describe it. It's a game that's been used around the world. I've used it with many of my students. It's called *Win as Much as You Can*, and here's the idea: Imagine that you're going to take out a coin, and three other people around you are going to do the same thing. In just a moment you are going to count to three and reveal a head or a tail. Now you're not going to just do this randomly. There's a choice and a strategic one to make. If you all go "heads," I'll give you one thousand dollars each (imaginary). But if one of you goes "tails" and the rest go "heads," the one who went "tails" the one who in effect cheats, you're going to get three thousand dollars, and the rest lose one thousand. But everyone has that same opportunity. And if you all go "tails," each of you loses one thousand dollars. So what would you do? On the count of three—one, two, three—and then you look very nervously. Whether you do this one time or ten times, really interesting things happen because at the heart of the matter is the question: Can I trust these people? Are they going to cheat me? And they are asking the same question about you. Now what often happens is that people really struggle with this. They often don't cooperate. They often find that even if they all would do pretty well if they cooperated, given the circumstances, they often wind up killing each other. But that isn't hugely surprising.

Here's the thing that just blew me away: I majored in economics at Cornell, and one of my professors was a gentleman named Robert Frank. He's one of the top economists. He's a best-selling author, he's published in *The New York Times* regularly, he's a regular on *Planet Money*, and I studied with him. A few years after I graduated he published a study of this very game, and what he found was that the more economics training you have, the more you tend to cheat in this game. If you just have one semester of economics, you cheat sometimes in the coin game. If you have a full degree in it, as I did, you're a real jerk. If you're a graduate student, you're a total jerk. This is him describing this. Now here's the weird part—who wants to work with someone like that? Who wants to work with someone whose reputation is being so self-centered that he tends to just go for the gold and really cheat you. Well, there's something self-defeating about that. And Frank argued that that's a clue that the whole pretense of economics, that its self-seeking aspect, the way that it inculcates that self-seeking wealth maximization is the goal—there's actually something self-defeating here. And we don't have to go far for specific examples of this.

Let me tell you about a guy I know who went to Harvard Business School, and while he was there, he, of course, studied economics, he read a book by Richard Dawkins called *The Selfish Gene*, and it changed his life. It reinforced all the things that he had learned in economics, and affirmed to him that we are basically designed to be self-seeking and aggrandizing in genetic ways, and also by extension in economic ways. And so when he had the chance to actually lead an organization, he instilled his whole organization with that principle. In fact, he said, "I've really thought about this very carefully and I've concluded that incentives and money is the only thing that matters." You may have heard of him. His name is Jeffrey Skilling, and he was the CEO of Enron, which for a while was highly respected, but which, as you know, collapsed in flames and turned out to be a total fraud. Jeffrey Skilling is now doing 25 to life in a federal penitentiary for massive fraud that ruined the life of thousands and thousands of people. Now his is an extreme case, but it sort of dramatizes that if you take this idea of self-seeking wealth maximization too far, it can ruin you, defile you, and many people around you. There's something self-defeating, as my professor, Robert Frank, so aptly demonstrated with this simple game. So that's the second strike against this economic theory.

Let me give you a third—the economic crisis of 2008. In November of 2008, just a year ago, Queen Elizabeth went to London School of Economics and she asked this rather shocking question: "How is it that all the economists missed this?" And you could've heard a pin drop. Do you see the irony? This isn't the Emperor who had no clothes. This is the emperor revealing that everyone around her had no clothes. She was pointing out that none of the economists really saw this coming. Where was their expertise? Where was their ability to predict? And the truth was that they lacked it. I've actually met a seasoned economist who, at a conference said, "I no longer call myself an economist because I've realized from this last year that we simply don't know what we're talking about. And I'm ashamed to admit that I'm in this field." And he's not alone. Consider Paul Krugman, Nobel Lauriat in economics last year, and what does he say? "The last thirty years of macroeconomics may have been a waste of time at best." That's pretty

damning, and yet often give a high level of confidence to what really is a pretense of knowledge about this field we call economics. We call it a social science, and it's inspired for the last two hundred years by the idea that we can do at the social level what Isaac Newton did at the physical level—the ability to discern scientifically rules that can predict what happens in the world around us. Well, it's ironic because Isaac Newton himself did not believe the economic project. In 1728, Isaac Newton himself was ruined by another economic crisis, the South Sea Bubble. He was wiped out personally, and afterwards, the man who basically started the Enlightenment, or inspired it, was asked, "How did this happen to you?" And he famously said, "I can predict the motion of the heavenly bodies, but I can't predict the madness of crowds." Well, that's apt, but economics holds out the hope that it really can "predict the madness of crowds," and as we've seen in the last year, it really can't. Virtually almost nobody actually called this one. And that suggests that our pretense of science for economics is actually misplaced. It doesn't mean it's without any insight whatsoever, but it does mean that it's time to look anew at these questions of prosperity.

If economics is like this, if what we've seen the last few minutes is true, then perhaps we need to change if we hope to help Suffia Begham and, for that matter, ourselves. Perhaps it's time to suspend our over-hyped reliance on economic theory as it's now held. Perhaps it's time to put away loaded, faith-based terms like "rationality" as they use the term. Perhaps it's time to begin exploring the richer, more remarkable and subtle nature of prosperity. Perhaps that means that self-interest is a part of the story, as they would hold it is, but it's not the whole of it. It's only a part. What else matters? What else can give us a clue about prosperity?

Before I delve into that, let me just suggest that ultimately the answer is that it is a mystery, that we have good reason to be humble in the presence of a question of that scale, and despite decades, hundreds of years of striving, we really are, as the last year has demonstrated, pretty much in the starting blocks of trying to discern what we can predictably say causes so much of the wealth that we enjoy today. It doesn't mean that we're without any ideas, but much of it remains a mystery, which is good news because it means we have reason to be humble and grateful and to respond to that gratitude in ways of gentle service, and that's why I'm talking about Suffia Begham because if we are prosperous and we're not sure why, then maybe we have reason to share more than we have.

So with that, let's venture out and see if we might be able to find at least some new clues beyond the usual bounds of economics. What I'd like to argue to start with is that at the very heart of the problem of cooperation and collaboration—working together in economic life—is the problem of trust. How do I know that you're going to be fair to me? How do I know that you're going to be decent to me? How do I know that you're going to be able to keep the promises that you make to me? All of these and more are trust problems. They are different facets of the same question: Can I trust you? I'm going to argue that that is at the very heart of our economic lives together. If we cannot find a way to wisely trust each other and be trusted in turn, then we can forget about our ability

to cooperate efficiently or in any other way. We're just going to grind each other into a powder, or as we've seen in the last year, when trust disappears, the markets freeze up, nobody wants to invest, nobody wants to borrow, nobody can borrow, and the economy dries up. This is a deeply crucial part, and indeed it was at the very heart of the problem of Suffia Begham's situation; she was not trusted and therefore she was destitute.

So how do we solve this problem of trust. Well, let me show you. Before I even answer that, indeed how central this question is to our economic lives together. I'm going to argue that if you think about a firm, one of the most basic parts of economic life, think of a firm for a moment, I'm going to argue that it exists entirely of credible promises and trust. That is the sum and substance of what any firm comes down to. That may seem strange to say because when you think of a firm, what do you think of? You think of oil wells and office buildings and furniture and accounts receivable and money and computers and all the rest of it, right? I'm going to argue that that's all in a sense smoke and mirrors, that really at the heart of the matter is something much more ineffable and immaterial, something very amorphous. Let me show you why I say that.

Let's imagine that you have indeed got a firm, and I come to you and I say, "What's the most clearly valuable, straight up asset you've got?"

And you say, "Well, that's got to be money, pure money. I've got money; our firm's got money."

I say, "Great! Can I see it, please?"

And you say, "Sure, let's get our coats, we'll go down to the bank because that's where we keep it."

"Okay, great."

So we go and now here we are, we're talking to your banker and we say, "Can we see the money, please?"

And your banker taps a couple of buttons on the computer and prints out a piece of paper and says, "There, there's the number."

And you hand it to me and I look at it and I say, "Okay, but where's the money?"

And you and your banker look at each other and you say, "Well, that is the money."

I say, "No, it isn't. This is a scrap of paper. Where is the real money?"

And you say, "Well, come on, don't you know? We don't actually have it lying around here. It's all been loaned. Oh, we have a few dollars stacked away here for immediate needs, but if you and everyone who's deposited here actually came in and asked for the money at once, we couldn't give it to you."

And I say, "Wait a minute. You told me you have money, but now that I press you, you tell me that all you've got is a scrap of paper and a hope that when you ask for it this

money is going to show up? What is that? That's not money; that's a promise, and that's really all you've got. Your firm really doesn't have money as such."

And indeed economists know this, and the federal banking system recognizes that essentially money is little more or less than a set of promises, and to the extent that you have faith that your bank really will deliver that money, to that extent you have wealth. But if you start to doubt it, and others around you do, and they all converge like they did with Jimmy Stewart in *It's a Wonderful Life!*, the bank goes away.

Well that's the story of money which seems to be the most clear, tangible form of wealth there is, and suddenly it just disappears on contact. Well, what else is there?

Think about accounts receivable, promises that others have made to you. Let me show you how critical the role of promises is to our entire financial system. Consider Citigroup. Do you know that up until a few months ago, Citigroup, the largest bank in America, one of the largest in the world, was a zombie bank. Or to put it another way, it was undead. What I mean by that, it had on its books promises from people that it lent money to to buy houses, and let's say that amount was 100 billion dollars, as long as Citibank went around claiming that it had 100 billion dollars waiting to draw from these borrowers, it was in good shape. But the truth was that in the last year, those mortgages had basically become worthless, or at least a large percentage—20, 30, 40 percent were under water and were likely to go into foreclosure. And if those numbers were truly recognized on the books of Citigroup, if it was actually acknowledged by Citigroup that those promises were now in-credible, it was bankrupt. It was alive only in appearance, but functionally it was dead. That's why it was called a zombie bank. And the only way that it was able to survive was because the government stepped in and made new, better promises that put aside the need to rely on these bad promises. And that's how our system survived. Now that's another clue—our banking system, that at the heart of any company that has accounts receivable, it's relying to a large extent on promises.

But not just accounts receivable. What about Coca-Cola? Coca-Cola's single best asset, far and away, is its trademark. As you know, Coca-Cola is the most recognized insignia in the world, and it has tremendous good will. It's worth billions of dollars. But what if it starts to become believed that a bottle of Coca-Cola has arsenic in it? That insignia and the good will behind it, the credibility that the public has in that insignia will suddenly become worthless, and with it Coca-Cola will cease to be worth a great deal of money at all. There again, good will, the trademark, there too it's the promise or credibility or trustworthiness of this company that defines what its wealth really is, and you can go down the whole list of assets and liabilities that make up a company, and do exactly the same thing. You can even do it for things like real estate and office furniture and office buildings. Aren't those tangible and aren't those material things? That's real wealth, isn't it? But wait a minute. How do you know that you really own them? How do you know that people who operate them for you are going to operate them correctly? How do you know that you're not being ripped off from your warehouse right now? All of these questions that really make or break the utility of these assets to you, they all depend on promises—the promises of sellers, the promises of the government around

you, the promises of the employees, and if any of these promises fall, so too does the wealth behind those assets.

And go further. How about the morale of your company, the employees? If they're not getting along well, if they don't trust each other, your company is going to grind itself into a powder. And if you can't trust your counterparts in major negotiations, your joint venture partners, your suppliers, the people you supply to, if there's a distrust there, you can forget about your ability to do business. In short, your business and everyone's business is largely not stuck in the material. It's grounded on something profoundly immaterial, and that is something relational. The relational is the foundation for the material. The immaterial is key to our material prosperity, which is a happy coincidence because we are here tonight to talk about human capital, to talk about something that is human, that's ineffable, that's relational, that's (dare I say it) touchy-feely, that may be hard to measure, that may not fit in very well to an economist's formula, and yet here we are finding that, oh my gosh, just as we saw in the first segment, now we're seeing as we look at a firm itself that the immaterial really is at the heart of the matter.

But how are we supposed to make credible promises? How do we know that we can trust each other? If we over-trust or under-trust, if we trust unwisely or insufficiently we've got a problem. Suffia Begham has a problem because she wasn't trusted enough. Our economy has a problem because people over-trusted—they gave money to people who clearly should not have been given tremendous amounts of money. Do you know there's a guy in Southern California who's a \$14,000.00 a year worker; he worked as a migrant worker picking strawberries, and he was loaned \$700,000.00 to buy a house for that amount of money three years ago. Now that's too much trust. So how do we make wise choices about the promises that we're making to each other? Over or under-trusting and we're ruined. So what do we do?

The first answer is that we use something that I'm going to call *soft sources of trust*. We use the things that we usually think about when we're talking about human capital. We rely on our identity as members of the same group. Hey, we're from the same fraternity, the same factory, the same family, the same country. Those connections are deeply important to us in different ways, and they help build morale and trust and cohesion—those are good norms. Group wisdom, networks, friendships, common goals, the very things that we usually associate with human capital, they are central to our ability to get along, and if we don't have them we struggle, so much so that there is an entire field in academic life now, that's been basically growing for the last fifteen years, and it's interestingly a similarly named field—social capital. Essentially what it holds is that an economy, a firm, a community cannot function unless group connection, network, the stuff that we usually associate with human capital is strongly present. And this is reassuring to us—those of us who are interested in the subject because it does indeed affirm that yes, at the heart of the matter the *soft* stuff, the human stuff, beyond just mere calculation rationality, those things matter.

But there's a problem with that too. Often, as wonderful as these human elements are, they are not enough to create sufficient human capital to solve the trust problem. Let me say that again because it's really at the heart of the matter. Group connection and

networking and friendship, as important as they are, may not be enough by themselves to create sufficient human capital for us to solve the trust problem. Let me show you why I say this.

I'll tell you a story. I want to take you on a trip to Hungary. A couple of researchers went there back in the early 1990s, and when they went they wanted to find out how firms that were in the Soviet Block, how did they actually function? What was it like now that the veil has been lifted and we can actually go and see? And they looked at a variety of firms, and they settled on one that seemed particularly symbolic or representative of what so many of the firms they looked at seemed to be about. It was a glass making firm in Hungary that had actually been in existence since the 1700s, and it had clearly been well-influenced and it had been operating and influenced during the Communist period. Now I don't know about you, but I would have expected that this firm, and the researchers would have expected that this firm would have been suffocating under stolid, Soviet-style bureaucracy—lots of rules and regulations and overseers and endless bureaucratic intrigue, all the stuff that drives us crazy about organizational life. That wasn't what happened. What they found was quite the opposite, that the firm was really free functionally from any bureaucratic oversight. What actually was going on was that it was strictly relational, that the only thing that really seemed to matter, that really shaped how this firm was going to function was the relationships among the workers themselves—their group attachments, their networks, their relationships, the stuff we were just talking about, human capital. And how was that going for them? It was *Lord of the Flies*. They were killing each other, almost literally, because it turns out that the way this firm worked was that you got your job because somebody in the firm whom you related to, had been there before and could speak well for you. And it was actually a legacy that went back in some cases generations. Once you were in, you were part not just of the firm, but of a tribe, and as long as your tribe was big and powerful, you were set, but if your tribe was small and weak, look out! It was almost like *West Side Story*. And if you were one of the few who just happened to not be part of one of these tribes, you were fair game. And people who were fair game could see that their car tires were slashed, they would have their stuff stolen, they were subject to harassment. And even if you were part of a small tribe, the same thing could happen. Morale was terrible. Absenteeism was soaring. There were a lot of people in the big tribes who never showed up at all; they were just feather-bedded. There was a tremendous amount of cronyism and corruption. And where were the bosses? They were virtually unseen.

Meanwhile the researchers did something rather noteworthy—they went to find a contrast. And where did they go? They went to Southern California and they looked at an aircraft manufacturer. And I know this is America, it turns out this was the one that was the bureaucratic story. They had all these rules and forums and papers and overseers and bosses. They had merit reviews and they had to pass exams to get in. It was a very bureaucratic kind of place. What was morale like in that firm? It was great. Not only was it great, it was very low absenteeism, morale was very good, there was never any hint of people stealing from each other, there was certainly no tribalism, and people were from different classes and regions and races—they got along famously; they really trusted each other. They had high degrees of trust for each other. And when

you asked them why they would tell you, “Because the people are just nice, good people.”

“Now wait a minute! Don’t you think that maybe the rules, the regulations, the bureaucracy and all that, is keeping you guys honest to a degree that the Hungarian firm is not being kept honest?”

“What are you talking about? These are just nice people.”

It turns out we have good empirical research that suggests that that’s actually the way we tend to respond to protections. And I’m going to give a name to the second kind of solution to the trust problem, these protections. I’m going to refer to them as *trust mechanisms*. And by trust mechanisms what I mean is something that enables us to reassure ourselves that the other person is going to keep his promise. By trust mechanisms I mean any arrangement that strengthens your confidence in the trustworthiness of the other person.

Let me illustrate it with a story. (Some of my listeners may recall this from another venue.) I was out one day at the beach with my nephew Jason. He’s six years old, and we were frolicking in the water, and at one point I turned to him and said, “Jason, let me throw you into the water. Let me flip you in.”

And he said, “No!”

And I said, “Okay, okay, I won’t flip you.” But now he doesn’t want me to touch him. And I said, “Jason, I promise I won’t flip you.” But even though we have known each other since the day he was born, six years earlier, and we love each other with the whole family to draw on, he wasn’t buying any of it. I couldn’t play with him anymore. And I was now face to face with a trust problem, what to do? Well, I could have appealed to our human capital. I could have appealed to family and relationship and good norms and networks and all the rest. It wasn’t working. But then I said nine words, and when I spoke those nine words, everything changed. The nine words were these, “Jason, I promise I won’t flip you, and if I do, I’ll give you ten dollars.”

And instantly he said, “Okay.” And we were back, and we were frolicking, and I never flipped him, and I never paid him the ten bucks.

Well you might say, “Freeman, that’s your big payoff? You bribed the kid. How can you live with yourself?”

Actually, I didn’t bribe him. I gave him something else. I gave him a trust mechanism. And what I mean by that is I gave him a way to reassure him that my promise was reliable. Now I could have given him one of several different kinds of trust mechanisms. One thing I could’ve done, I could’ve said, “Look, Jason, let’s get your mother here. You trust her. If she vouches for me, that’s your reassurance.” That might’ve worked. Or I could’ve separately said, “Look, Jason, I promise I won’t flip you, and let’s go get the lifeguard and ask him to watch me, and he’ll protect you.” That might’ve helped too. In

this case, I gave myself a penalty and I gave him an incentive. If I broke my word, he would get rewarded and I would be penalized. And that worked.

Now it turns out that trust mechanisms don't just work for six-year-old boys. They work around the world. And indeed, if you think about it, they're everywhere. They include things like monitors, rules, reputation reports, power sharing, incentives, penalties, collateral, guarantors, references, arbiters, bi-laws, bureaucracy, mediation—there's a vast array and we squeam at it. Often we don't even notice that it's present, and that's the remarkable thing.

If you wisely choose trust mechanisms, they can unobtrusively nurture human capital and trust. Let me give you a few examples of this. Our country. Do you know that in 1786 our country nearly fell apart? There was a rebellion in Western Massachusetts and it was about to take over the country, and the national leaders in Philadelphia realized that if they didn't raise an army, the country was ruined. So every state committed, promised to put up money to raise an army and go put down the rebellion, and then they all failed to pay a penny. And but for the grace of God, the rebellion would have continued. It was actually put down privately. But afterwards James Madison said, "If we don't take this seriously we're dead. We simply have to solve the trust problem." And so he and others got together that next year and they came up with a set of trust mechanisms to solve the problem, and we call that set *The United States Constitution*. *The US Constitution* is essentially a response to the inability of the states to live up to their promises. Had we not come up with that array, we would not have a country together. Now we usually think of our country as being a matter of patriotism and group love and connection. Of course we have red state, blue state, but there is a sense of deep cohesion to the United States that many countries envy, and that is wonderful, and that is to a large extent driven by human capital, but not exclusively. The presence of reassuring, unobtrusive trust mechanisms allowed our country to continue at a time when it would have otherwise fallen apart.

But it's not just there. It's also the California defense plant that I was just telling you about. Were it not for the basic bureaucratic processes that had been introduced, they might have easily become the Hungarian glass firm. They could have been driving themselves into *Lord of the Flies*, Part II. But it turns out that this also helps us understand Adam Smith better. Adam Smith's project in *The Wealth of Nations* was precisely to solve this same problem, the trust problem. He wanted to know, how is it that selfish people can be convinced to be cooperative? And his answer was largely free-market incentives. That's why he famously said, "The butcher makes the meat and the baker makes you bread." And that's true, but it's only part of the story. And in fact, Adam Smith knew that. Did you know he wrote a prequel to *The Wealth of Nations*? It's called *The Theory of Moral Sentiments*, and there he says that people are actually motivated by more than self-interest. Economics has forgotten that. But Adam Smith was really addressing a larger question: How do we get along with the trust problem when we're not sure we can trust each other? And part of his answer was free-market incentives and that is one example of trust mechanisms, but it's only a part.

Indeed, you've actually experienced what life is like with a trust mechanism. Do you remember the game that we played at the start of this, *The Ultimatum Game*? What if I had given ten thousand imaginary dollars to just Player A and said, "I hope you'll consider sharing this with Player B." How much would Player A have likely shared with Player B? But because I put in place a fair rule, and I enforced it with my authority as the game master, you had a much stronger chance of cooperating fairly, and you did. That's another clue that an unobtrusive rule, a trust mechanism actually fosters the very thing that we aspire to in our series—human capital.

Now it's absolutely true that there are dangers and limits to trust mechanisms, but there are dangers and limits to not living with them too. This then is the paradox, the paradox of our economic lives: To work, an economy depends on the immaterial—fairness, decency, trust, the stuff of human capital, yet to work, human capital needs to be nurtured by something mechanistic—trust mechanisms. So there are implications to all this. The task is "to be savvy as a serpent, as harmless as a dove." It's to nurture human capital with a mix of soft and firm sources of trust—both the human relational stuff on its own basis, and trust mechanism in wise combination to foster prosperity for all.

Let me show you as I conclude how you do that to transform lives because that ultimately is the name of the game. Let's remember again Suffia Begham. She, as you recall, had a trust problem. No one believed her promises and so she couldn't rise out of poverty. Standard economics of the day simply had no answers for her. But then one day a stranger came to her village and he spoke to her, and he said, "I would like to make you a rather strange offer. I would like to lend you money, but I will not expect that you will put up assets as collateral, nor will I expect you to sign a contract. Instead, I'm going to ask you and four of your neighbors to come and sit in front of me, and I'm going to make a promise to lend you, Miss Begham, a sum of money, and I will give that to you immediately. And I will give your four neighbors the promise that I will lend money to them if you pay the money back. In return I'll ask you to pay at a certain rate of interest, I'll ask you to meet my monitor when she comes and checks up on you, and I'll ask you to live up to certain good living principles as basic rules of operation. And if you're willing to live up to these rules, I will lend you this money."

And Suffia Begham said, "I accept." And so did her neighbors.

Well, why would this make any difference? It turns out it was critical. Suffia Begham did indeed pay the money back. She started a new business and she used the money to raise her family out of poverty. She paid the money back so then did her neighbors receive their money. They also were raised out of poverty, and so began the Grameen Bank which was founded in the years after by Muhammad Yunus, the stranger who first approached her in the story, and Muhammad Yunus went on to win the Nobel Peace Prize a few years ago for his work, inventing what we now know as *microfinance*.

Now microfinance is often characterized as a simple story of trust, but it's actually more subtle than that. If you look closely at Suffia Begham's story, check out what was going on. She was relying on the soft sources of trust, the peer pressure and encouragement of her neighbors. We refer to that as *social collateral*. She didn't want to let them down.

This program actually tapped beautifully into the native human capital of her village, but it didn't stop there. It also created incentives. "If you don't pay me back, your neighbors get nothing." And we have monitors in place—people checking up on her, and we have rules. What are those? Those are trust mechanisms. In short, the genius of microfinance and Muhammad Yunus is that he blended the pure forms of human capital—soft sources of trust, together with unobtrusive firm sources of trust—trust mechanisms, in a way that revolutionized the lives of tens of millions of people.

And so here's my conclusion: Where does our prosperity come from? Ultimately, contrary to economic theory, it is a mystery, which means we have reason to be humble and grateful in its presence. But we do have clues, and they are not necessarily the orthodox ones. The real clues are that prosperity and cooperation depend ultimately on trust, and trust depends on human capital and the things that can strengthen human capital, trust mechanisms. So there's a subtle interplay. In our gratitude then, let's humbly cultivate both sides of the equation, soft and firm sources of trust alike, to better our own prosperity and the prosperity of those around the world.

Human Capital in Pope Benedict XVI's Latest Encyclical *Caritas in Veritate*

Kimberly Shankman⁴

I intend to address three themes in the course of this evening: first, the Pope's conception of human reason and why that conception is of fundamental importance to understanding his teaching in *Caritas in Veritate*; second, how the Pope's conception of human capital differs from, and provides an alternative to, the conception drawn from modern economic thought; and finally, how this alternative, illuminated by the light of reason, can provide a basis for understanding and responding to our current economic conditions.

To begin, I'd like to spend a few minutes exploring Pope Benedict's understanding of reason. I believe that he signaled the importance of this topic by the very title he gave to the encyclical. As most of you know, a papal encyclical is a document addressed to the bishops of the world. Often others are specifically included; major encyclicals are generally addressed not only to the bishops, priests, religious, and the lay faithful, but also to "all people of goodwill." The purpose of an encyclical is to express the Pope's teaching on a significant contemporary issue. In this case, the subject matter of the encyclical is economic development. However, the encyclical we are considering is not called "integral human development" (although that phrase is part of the elaborated title of the encyclical). Its title does not refer to the economy, to development, or to policy at all. It is called "charity in truth." The question that then presents itself is why? Why was this title chosen for the encyclical?

Papal encyclicals do not get named by accident. It is a tradition of long standing that encyclicals are named by their opening words, and so a great deal of thought goes in to what those opening words will be. This leads to some oddly constructed sentences (at least in the English translations); but that's to be expected. It would get rather confusing to have a whole string of encyclicals called "I am writing this letter to explain. . ." Even so, it's reasonable to ask ourselves, why did the pope choose to spend the opening of this encyclical addressing a question that appears to be only tangentially related to the

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focus of the bulk of the letter? In the last paragraph of the introduction, he tells us why: “The church does not have technical solutions to offer and does not claim to interfere in any way in the politics of States. She does, however, have a mission of truth to accomplish, in every time and circumstance. . . . “[9]

I think that this is a deliberate challenge. The pope is asking us to consider two words not normally associated with economic policy. He is challenging us to examine our fundamental presuppositions—that charity is a sentimental impulse outside the sphere of economic analysis and that truth is a vestige of an outworn epistemology. Instead, he is proposing an alternative approach to understanding not only economic life, but more profoundly, the way we understand and relate to reality. It is primarily through calling the world, and particularly the faithful, to a clearer and deeper understanding of the relationship between charity and truth, and their connection to current problems of economic progress and development, that the Church can influence the world. He makes this clear in paragraph 31:

“The Church's social doctrine , . . can exercise, in this perspective, a function of extraordinary effectiveness. It allows faith, theology, metaphysics and science to come together in a collaborative effort in the service of humanity. . . . The excessive segmentation of knowledge, the rejection of metaphysics by the human sciences, the difficulties encountered by dialogue between science and theology are damaging not only to the development of knowledge, but also to the development of peoples, because these things make it harder to see the integral good of man in its various dimensions. The “broadening [of] our concept of reason and its application” is indispensable if we are to succeed in adequately weighing all the elements involved in the question of development and in the solution of socio-economic problems.” [31]

The Pope is asking us to think differently about our situation; he is not proposing particular solutions to our problems. However, his challenge to our common approach to social analysis is both profound and far-reaching.

Pope Benedict may be considered the “epistemological pope”. What we can know, how we can know, and the proper scope of our power of reason are all topics that he addresses over and over again, in a variety of contexts. But for him these topics are not just abstract philosophical questions. His speeches, letters, writings and addresses all bespeak an urgent project: not just to define and understand the nature of reason, but to articulate an understanding of reason that captures the connection between reason and truth, and reawakens the people of the world to the possibility of encountering the fullness of reality. Running throughout the body of his work, both before and after his elevation to the papacy, is this consistent concern to recover a broad conception of reason tied to the pursuit of truth.

Charity and truth. From the perspective of contemporary economics, the truth is irrelevant and charity is a distraction. Modern economics, like all social sciences, rests on a positivistic empiricism modeled after the natural sciences. It does not concern itself with the ends that people pursue, but only the means they use to achieve those ends. Economics, as a discipline, does not concern itself with the morality of economic activity, but with the rationality or effectiveness of that activity.

Let me briefly explain why this is and why the Pope finds it problematic. This limitation to observable phenomena can be traced back to a significant shift in worldview that took place beginning about 500 years ago. Prior to that time, since the emergence of Christendom, the dominant Western approach to understanding social structures was based on the attempt to model human society in accord with the order of the universe, understood by reflecting on God's law and the implications of human reason. (Even in the pre-Christian world, the dominant approach to understanding social life was to reflect on the meaning and order of nature) However, this proved (to put it mildly) a difficult task. Most particularly, the attempt to understand society in light of God's divine providence was a constant invitation to conflict between sacred and secular authority, as each contested for the right to provide the authoritative interpretation of God's will for political life within a community. This invitation to conflict often enough sparked violence. After the Protestant reformation, the mixture of the sacred and secular became even more problematic, as ever more points of violent confrontation presented themselves. As rulers chose sides in the battle between the Protestant churches and the Catholic church, the citizens suffered; Protestants killed Catholics and Catholics killed Protestants, all in the name of the mercy of God; each group pausing every so often to kill Jews in the name of the love of Christ.

At the same time, however, as Europe was plunged into a fever-pitch of turmoil and conflict in the realm of religion and politics, there was a tremendous flowering of insight and innovation in mathematics and the natural sciences. The discovery of calculus unfolded new worlds of explanatory power through mathematical description; the secrets of the laws of physics were being unfolded; and the mysterious workings of the human body were slowly revealing themselves. What had unsuccessfully been sought for in the realm of politics for centuries—a clear, coherent vision of the order and structure of the universe—was instead being revealed in the realm of the natural sciences.

In this atmosphere, that philosophical era known as the Enlightenment emerged. The basic assumption of Enlightenment thought was that political turmoil could be mitigated by approaching politics scientifically—by constructing a theory of public life and obligation that was based on observation and deduction. The early Enlightenment

thinkers, such as Thomas Hobbes, were explicit in arguing that the horizon of public life had to be reduced to exclude contention over the supernatural and even over the intangible aspects of natural life. In contrast to classical political philosophy, which argued that the goal of politics was the communal pursuit of the good life, Enlightenment thinkers insisted that such attempts at communal engagement were a recipe for interminable civil strife. Rather, they believed, the state should abstain from any attempt to develop or impose a common vision on society; it should devote itself to securing the maximum freedom for each citizen to pursue his or her own vision of the good.

John Locke provided perhaps the most fully developed Enlightenment account of civil society. In his thought, nature provides not a standard to aspire to, but a condition to escape. Individuals are, by nature, free, equal, and without any natural ties or obligations. However, to secure property, people are driven to form societies. Society remains stable by encouraging individuals to labor through the stimulation and unleashing of acquisitiveness. Locke asserts that the relentless pursuit of wealth and inflammation of desire is the most secure foundation for democratic or republican government. Of course, there is a corollary consequence: the state must recognize the panoply of possible desire; there is no single communal good to be striven for. Rather, the goal of politics is to secure for each individual the right to pursue his own conception of the good life. Freedom no longer consists in the ability to participate in the common discourse about the ends of society; rather it is the untrammelled ability to choose our own end, unencumbered by the consequences of the choices of others.

The political thought of the Enlightenment, then, attempted to separate politics from religion, and, to a certain extent, from traditional morality (for example, greed was redefined from a simple vice to a condition which may be a private vice, but was often, in fact, a public virtue). It was oriented toward individualism and explicitly rejected the ideal of a communal vision of the good life. Scientific reasoning was the model that these philosophers sought to emulate.

Over time, the continued advances of science have only increased the epistemic hegemony of the empiricist approach to knowledge. The social sciences have organized themselves in emulation of the natural sciences; of these, economics is clearly the most rigorously scientific. Beyond the academic realm, the influence of science as the normative mode of reasoning has spread throughout the culture. The result has been the division of the objects of thought into the realms of “fact” and “value”, with the assumption that only questions of fact are relevant subjects for public discourse. Because understanding the truth means going beyond the classification or analysis of empirically verifiable data, even the very concept of truth has become

suspect. The claim that the truth is accessible to human reason is viewed with suspicion as potentially dogmatic, judgmental, and intolerant. From a post-modern perspective truth claims are primarily tools for maintaining privilege and power

Within this world-view, reason becomes almost entirely instrumental. We may develop increasingly sophisticated rational models to predict and even to influence behavior, but we do not expect this to yield any insight into the truth of a given situation. To search for truth is to pursue a ghost. Reason can analyze and describe the perceptible world, but beyond that is the entirely subjective realm of evaluation, which is completely outside the purview of reason.

This is the dominant view of reason that the Pope rejects. He rejects this not only because he believes it is wrong—in other words, he does believe that truth exists and that people can access the truth through the development and application of the power of reason—but also because he believes that it is pernicious. Losing the truth, narrowing the understanding of reason, and contracting the sphere of rational discourse all serve to make authentic human interaction increasingly difficult and ultimately impossible. As he says near the beginning of this encyclical, “Without truth, without trust and love for what is true, there is no social conscience and responsibility, and social action ends up serving private interests and the logic of power. . . .” [5]

In his address at the University of Regensburg, the Pope provided an extended reflection on the relationship between reason and truth, and that reflection sheds light on his approach in this encyclical. In that address, the Pope engages head-on with the assumption that the limitation of reason to the visible, empirical world—the elimination of consideration of the good, the true, and the beautiful as subjects of rational discourse—fosters and encourages peace and civility. Actually, he argues, the restriction of reason to the “interplay of mathematical and empirical elements” leaves men’s deepest longings unaddressed. This is how he describes the “pathology” of the modern conception of reason:

“The specifically human questions about our origin and destiny, the questions raised by religion and ethics, then have no place within the purview of collective reason as defined by “science”, so understood, and must thus be relegated to the realm of the subjective. The subject then decides, on the basis of his experiences, what he considers tenable in matters of religion, and the subjective “conscience” becomes the sole arbiter of what is ethical. In this way, though, ethics and religion lose their power to create a community and become a completely personal matter. This is a dangerous state of affairs for humanity, as we see from the disturbing pathologies of religion and reason which necessarily erupt when reason is so reduced that questions of religion and ethics no longer concern it.” (Regensburg)

It is precisely because this reduced scope of reason leaves these deepest questions outside of the realm of rational discourse that they tend to become pathological. In the Regensburg address the Pope famously included a discussion of a dialogue between a Muslim Persian and a Christian Emperor, in which the Emperor indicated that the Islamic support for spreading the faith through violence was wrong. Benedict reflected on this as an example of the importance of linking faith and reason—because the Christian Emperor understood that God is ultimately the source and summit of rationality, he could deduce that something spreading the faith through the sword was not consistent with God's nature; whereas the Muslim interlocutor, because he believed God to be completely transcendent, inaccessible to human understanding. Thus one could make no deductions from the nature of God to the kind of conduct He would support. Lost in the criticism of the Pope's apparent disparagement of Islam was the fact that the bulk of his speech was directed toward warning Christians of the danger of "derationalizing" Christianity—that is, accepting the assumption that the nature of God (and of man's in relation to God) is inaccessible to human reason. His point was, I believe, that the impulse to faith-based violence comes not from the introduction of the concerns of faith into public discourse, but with the freeing of faith from the discipline of rational control. Thus it is not the narrow conception of reason, limited to the observable and technical, but the broader, richer conception, addressing fundamental concerns and desires, that lays the foundation for solidarity and peace.

In *Caritas and Veritate*, the pope re-emphasizes the connection between a robust conception of reason—one in which charity is seen as an appropriate subject for rational consideration and the truth is understood as embracing and founded on charity—and a healthy social discourse:

"Only in truth does charity shine forth, only in truth can charity be authentically lived. Truth is the light that gives meaning and value to charity. That light is both the light of reason and the light of faith, through which the intellect attains to the natural and supernatural truth of charity: it grasps its meaning as gift, acceptance, and communion. Without truth, charity degenerates into sentimentality. Love becomes an empty shell, to be filled in an arbitrary way. In a culture without truth, this is the fatal risk facing love. It falls prey to contingent subjective emotions and opinions, the word "love" is abused and distorted, to the point where it comes to mean the opposite." [3]

It is this more robust conception of reason that provides a basis for healthy community; as Benedict says: "because it is filled with truth, charity can be understood in the abundance of its values, it can be shared and communicated. Truth, in fact, is logos which creates dia-logos, and hence communication and communion. Truth, by enabling men and women to let go of their subjective opinions and impressions, allows them to

move beyond cultural and historical limitations and to come together in the assessment of the value and substance of things.” [4]

Benedict is making the case that our approach to public discourse—limiting it to the realm of empirical and factual discussion—is entirely upside down. Civic peace and solidarity does not result from the reduction of reason to the merely observable and instrumental; rather, that reduction makes it impossible for us to clearly understand the challenges we face and so to develop appropriate solutions.

In particular, the Pope has emphasized over and over again throughout his career, banning God from the public square does not enrich debate by allowing for all community members to participate regardless of their system of belief (or, of course, disbelief). Instead, he argues, this distorts and trivializes public discourse by removing the fundamental touchstone of morality from consideration of the most profound issues. In *Caritas in Veritate*, the Pope elaborates on this:

“The Christian religion and other religions can offer their contribution to development *only if God has a place in the public realm*, specifically in regard to its cultural, social, economic, and particularly its political dimensions. . . . Denying the right to profess one's religion in public and the right to bring the truths of faith to bear upon public life has negative consequences for true development. The exclusion of religion from the public square — and, at the other extreme, religious fundamentalism — hinders an encounter between persons and their collaboration for the progress of humanity.” [56]

What does all this have to do with the concept of human capital? In fact, it points the way to a radical reconceptualization of it, one based on this fuller and more robust conception of reason.

The standard definition of human capital is, at the individual level “the stock of knowledge and skill, embodied in an individual as a result of education, training, and experience, that makes him or her more productive” and at the social level the sum total of the skills of a given workforce. There are, of course, a number of assumptions buried in this definition, the clearest of which is that the human person is an instrumental unit in the workforce whose skills and knowledge are separable from his or her essential humanity.

We can clearly see that this conception has its basis in the Enlightenment vision of the human person: an isolated individual who essentially owns him or herself—Locke, for example, explicitly grounds the right to private property on the concept of self-ownership—and who therefore can sell parts of him or herself—knowledge and skills, or, in the more extreme cases of this logic, which we tend to remain vestigially revolted by, his or her organs and other bodily functions. The Enlightenment vision of the human

person portrays an isolated individual, alone against the world, who is motivated by a limitless, and thus ultimately unsatisfying, quest for accumulation of ever more material possessions. To effectively pursue this desire, this individual invests in his or her human capital to become a more valuable commodity on the labor market. Even Gary Becker, the Nobel-prize winning economist who has done so much to popularize and apply this concept, noted that when he first began writing he hesitated to use the term, because he realized that he would be criticized (which he was) for the instrumentalist connotations that it carried. By the 90's, he was happy to note, that criticism no longer occurred. As a society, we seem to have grown more and more comfortable with applying the Enlightenment logic of individualism and materialism.

The limitless desire for accumulation that drives the Enlightenment system has, on the one hand, significant benefits. We recognize that accumulation requires labor, and that the development of our "human capital" will help us achieve the possibility of even greater levels of accumulation. Because human labor provides surplus value to the raw materials of the earth, the more we work the more "stuff" there is available for everyone. If we pursue wealth without limit our labor will provide a surplus that will benefit all around us.

However, the system is driven by a vision of human personhood that is based on both isolated individualism and the assumption of self-ownership. Benedict directly challenges these underlying assumptions: "Sometimes modern man is wrongly convinced that he is the sole author of himself, his life, and society." He goes on to make the connection between this concept of self-ownership with materialism: "The conviction that man is self-sufficient and can successfully eliminate the evil present in history by his own action alone has led him to confuse happiness and salvation with immanent forms of material prosperity and social action." [34] This materialistic fallacy leads to the commoditization of basic human values, including education, sexuality, and even family (for example, the Pope's discussion of the need for wealthy nations to embrace openness to large families as a way to divert their economic and intellectual resources away from satisfying the selfish desires of their citizens clearly implies that the birth-rate crisis that many developed nations are currently experiencing is a result of focusing on satisfying those desires).

Furthermore, there is a dark underbelly to this Lockean cycle of labor and accumulation. Because we can accumulate more when goods are cheap, there is consequently always pressure to effectively "freeze" some part of the workforce (in America, in the 18th and early 19th centuries it was slaves; in the late 19th and early 20th it was immigrants, women and children) and prevent them from developing to their fullest potential, so that they can provide a pool of cheap labor to produce cheap goods.

Today that pool of cheap labor resides primarily in the under-developed world. Technological advances have made it possible for firms to move with almost frightening mobility from one labor market to another, in search of new sources of cheap labor. Although in the developed world we comfort ourselves with the recognition that the low-paid jobs that multi-national companies provide do give people in the under-developed countries of the world access to more opportunity than they would otherwise have, Benedict insists that we can not shut our eyes to the ongoing human costs imposed by this phenomenon. In paragraph 25, for example, the Pope asks us to recognize the psychological instability (and not just the economic costs) generated by the mobility of labor, and points out that this has a negative effect not only on economic life and activity, but also on personal and family development, since it is difficult to forge what he calls “coherent life plans, including marriage” in a situation of constant uncertainty about the economic future. Much of chapter 3 of the encyclical is devoted to reminding us that the commercial logic of the market will not be sufficient to guide the process of globalization in a healthy and humane way by itself. This logic must be supplemented by a more robust view of human capital, one which is based not on the commodification of the human person, but rather on integral development and solidarity, taking into account the social, as well as the individual, aspects of human personhood.

Pope Benedict provides this strikingly different account of human capital, when he states: “it must never be forgotten that the primary capital to be safeguarded and valued is man, the human person in his or her integrity.” Thus he indicates that human capital should be understood not as specific skills or qualities, but that the true treasure is humanity itself. The person in the fullness of their integrity is the end that the economy is to serve, not the raw material to produce goods and services.

This definition is reminiscent of the story of St. Lawrence. St. Lawrence lived in the first half of the 3rd century. During the run-up to the Diocletian persecution of the church, Lawrence, who was one of the deacons of Rome, was ordered to turn over all the treasures of the church to the authorities. On the day appointed for him to do so, he brought the officials to his church, where he had gathered the poor, the sick, and the lame. Here are the real treasures of the church, he told the authorities. (They, of course, were not particularly amused, and Lawrence was taken and martyred by being roasted on a gridiron. Pope Benedict is unlikely to meet a similar fate, although he does run the risk, like St. Lawrence, of having those in authority just not get the point). Like St. Lawrence, Pope Benedict is pointing us to a more human understanding of the riches of the world.

This different understanding of human capital is based on a fundamentally different understanding of human personhood. Whereas the Enlightenment vision is driven by

the concept of self-ownership, the papal vision is driven by the concept of gratuitousness—giftedness. Rather than seeing ourselves as the owners and shapers of our lives, the Pope asks us to recognize that we are all the recipients of an abundance of blessings—talents, opportunities, support—of which we are stewards.

As Americans, particularly successful Americans, we struggle with this concept. We have this Lockean ethos deeply entrenched in our national psyche, and we tend to be most comfortable thinking of our material prosperity as the legitimate reward for our hard work. The Pope is asking us to give up this comforting sense of desert.

It's a little easier for us to see the element of gratuitousness in the world of professional sports. We all know that Michael Jordan worked very hard to become the best player in NBA history. However, we all realize that everyone else in the NBA during his career also worked very hard. I'm sure Patrick Ewing worked very hard. There were probably some players who even worked harder than he did (one of the things I've learned about Michael Jordan is that he hated to run backwards, and so in practice he was often allowed to skip the running backwards drills). It didn't do any of them any good, because they just didn't have the pool of talent to work with that he did.

All of you who are students here at Columbia, I am sure that you also worked very hard throughout your life to qualify yourselves for such a tremendous opportunity; I'm also sure you are continuing to work hard while you're here to prepare yourselves for the best possible future. However, in many ways you're like Michael Jordan. As you take stock of your life I'm sure you'll recognize that you were blessed with many talents, particularly intellectual ability; you had loving, supporting families that encouraged your development; and you attended high schools that provided the curriculum and instruction that prepared you for the challenge of a top-flight university. All of those things are pure gift. Even the drive and ambition that inspired you to prepare yourself for this challenge is a gift. You are no more responsible for them than you are for the color of your hair (maybe less).

The pope is not asking the blessed of the world to wallow in a miasma of guilt; at the same time, however, he is asking those of us who enjoy the benefits of these blessings to consider the absolute and inscrutable gratuitousness of these gifts. We are not being called to reject the fruits of our labors, but to remember that perhaps those who have been less richly blessed have a claim that is more fundamental than our Enlightenment vision would allow. Perhaps in a remote village in North Korea or Pakistan or Ecuador there is a young person just as smart, just as ambitious, just as determined as the students in this room. Just as we might say, looking at the rewards our blessings have brought us here in America that from the perspective of giftedness we may not "deserve" them in a moral sense, we can also say that the young man or woman

doesn't "deserve" to live without any chance to develop his or her talents; who can only look forward to a life of poverty, disease, and possible starvation. This is not our fault; at a certain level it's not even our responsibility, but it is our concern; that young man or woman is a child of God just as we are.

I would formulate the Pope's understanding of human capital as follows: the stewardship of the gifts we have been blessed with for the benefit of all. This understanding, we can see, flows from and is based on the broad conception of reason that the encyclical's title points to. By reflecting on what it means to be human—not only our behaviors, but the source and destination of our gifts and talents—we are drawn to the conclusion that competitive individualism is an insufficient foundation for a healthy and humane economy. The truth about the human person—the fact that we are not owners of ourselves but stewards of gifts, talents, and blessings that we did not create—points inexorably to the necessity of charity as an integral component of all human relations, including economic relations. "Charity in Truth" turns out to be the right title for an economic policy encyclical after all.

I'd like to spend just a couple of minutes applying this understanding to our contemporary situation, and then I will address what I am sure is the primary objection to the Pope's analysis.

One of the fundamental precepts of the Pope's approach to economic life is the recognition that every economic act is also a moral act. A basic moral principle to guide economic life is that reward within the economy should be tied to the creation of value. As we are all aware at this juncture, the current global economic crisis had its origin, in large measure, because we lost sight of this fundamental principle. Mind-boggling amounts of money were made by trading credit derivatives which rested on assets that bore virtually no relationship to the amount either of underlying value or prudently calculated risk. It was inevitable that this bubble would pop; it did, and we are still trying to work our way out from under the rubble that was left in its wake.

The pope uses the discussion of the morality of tying reward to value to usher in his discussion of business ethics, which is one of the richest and most provocative passages of the entire encyclical. Unlike many commentators, who seem to see instruction in business ethics as a panacea for almost every ill that affects our financial system, Pope Benedict has a relatively guarded approach to the concept. First, he insists that not all systems that call themselves "ethical" truly are; some approaches to ethics can actually lead to choices contrary to justice and human welfare. Second, he insists that ethics can only be effective if they look beyond existing economic and financial systems and hold them to a standard beyond themselves. Finally, he is emphatic that ethics, to be effective and deserve the name, must be based on the full

and rich understanding of the human person that informs the entire encyclical, and in particular is based upon an understanding of the dignity of the human person and the transcendent value of natural moral norms.

To explain this, I'll give you an example that is so perfect that if it hadn't existed, I would have had to make it up—but I didn't.

You may remember Mitt Romney, former Governor of Massachusetts and former presidential candidate. One aspect of Governor Romney's character that all observers acknowledge, even those who were vehemently opposed to his policies and active political opponents, is that he is a man of faith. His Mormon beliefs are central to his character. As many of you know, the Mormon church supports traditional morality and is explicitly opposed to the pernicious influence of pornography in our culture. For many years, Gov. Romney was a member of the Board of Directors of the Marriott corporation, and during that time an activist anti-pornography coalition appealed to him to persuade the Board to remove access to pornographic movies from Marriott hotels. Although Marriott board minutes are not made public, when pressed to discuss whether or not Gov. Romney had actively attempted to influence the board to remove this material, a spokesman answered that the revenue from adult entertainment is an important component of the revenue stream of these hotels, and therefore it would be unethical of Governor Romney to attempt to impose his personal beliefs upon the Board to influence them to make a decision which would hurt the profitability of the company. In this example you see a perfect example of the "anti-ethics" the Pope is concerned with. If the only, the highest ethical norm is the profitability of the company, the realm of business ethics becomes distorted out of all recognition. We can see in Governor Romney's response the complete adoption of the Enlightenment model of rationality—since profit and loss can be measured, they are perfectly legitimate areas for public discussion. All other more fundamental concerns are mere subjective, private, personal values, not to be imposed on an unwilling audience.

Regardless of what we may think about the danger of abusing legitimate realms of freedom by attempting to make pornography illegal, it is obvious that no understanding of the human person based on a recognition of inherent dignity can see it as a matter of indifference. Even leaving aside the mountains of documentation of the harmful effects that pornography has on the consumers and their families, you don't really need to be a refined social observer to recognize the exploitation and degradation that is the only possible basis for the production of pornography. To think that it would be considered outside the realm of legitimate ethical discourse for Governor Romney to use, not his political power as state governor, but merely his persuasive power as one director among many, to ask the directors of a company to reflect on whether they wish to

continue to profit by cashing in on this kind of trafficking in human misery and humiliation demonstrates just how significant is Pope Benedict's call for a new approach to understanding the proper scope of reason and civil discourse.

Another example of the significance of Pope Benedict's approach to understanding and encountering the economic realm is his discussion of globalization. The flip side of a world view that takes an instrumentalist view of the human person is the perception that the economic system is governed by impersonal forces that the actors in the system can neither control nor direct. The Pope calls us clearly to reject this passive approach to globalization. Viewing globalization from a deterministic perspective allows us to lose sight of the fact that in and of itself the process of globalization is morally neutral; it is only through human agency and responsibility that it becomes a potential engine of increased communion and sharing of the goods of the earth.

You know, as a teacher of American political thought, I inevitably encounter my students' horror and disgust that Jefferson, the man who solemnly declared that "all men are created equal" was himself a slaveholder. Of course we all rightly recoil from the hypocrisy that exhibits. However, because I think it's important that we not get too complacent in our judgments I routinely follow that discussion up with a question to my students. Are they aware of the horrendous working conditions facing many of the people in China, who manufacture the goods that fill the shelves at our local big-box stores? Yes, they are. Do they think it wrong that workers are exploited and endangered in this way? Yes, they do. Do they still shop at Wal-Mart? Well, of course—we live in Atchison Kansas for heaven's sake—what else are we going to do? They see the point. But then we move on to a larger point. Honestly, in the overall sweep of world history, whether Jefferson did or did not own slaves had almost no impact on the unfolding of human freedom. His fellow revolutionary John Adams never owned a slave. But who had the greater impact? Jefferson. Why? Because Jefferson's words forced Americans to consider the implications of their actions, and to have to grapple with the implications of a regime dedicated to freedom and equality that supported human slavery.

Similarly, I think whether I and my students shop at Wal-mart will have virtually no impact on the direction and sweep of globalization. However, I do think how we think about globalization, and how we persuade others to think about it, can be of profound, lasting, and even world-historical importance. That is what I believe the urgent message of *Caritas in Veritate* is: that to recover the possibility of the truth about the human person is the only secure foundation for a lasting and just global economic order.

This brings me to my final point. I am sure that by now there are many who are thinking that this a wonderful example of academic romantic nonsense (although perhaps you are evenly divided in thinking this is the Pope's romantic nonsense or my romantic nonsense). Because, after all, it is only through the hard-headed, and frankly, remorseless application of the enlightenment-based economic rational man model that the world has experienced the amazing growth in prosperity that has marked the industrial and post-industrial eras. If John Locke could come back today, even he would undoubtedly be astonished at how well his system of unleashing acquisitiveness to spur production and plenty has worked. So, aren't I (or the pope) asking for a return to squalor and misery. Isn't this a legitimate trade-off—an instrumental understanding of human capital for all this that we're surrounded with?

Not exactly. No one believes, or wants, to turn the clock back to pre-Enlightenment ways of thinking. Religious freedom, for example, is a great advance in human history, because tying the sacred and the secular so closely together gave too much weight to the state and prevented the authentic development of the human faculties of conscience and discernment. Throughout *Caritas in Veritate*, Pope Benedict emphasizes the significance of subsidiarity; of strengthening organizations that are neither states nor firms; organizations that mediate between the individual and the state and provide an alternative to the dichotomy between the all-encompassing state and the isolated individual alone against a competitive market.

A logic of gratuitousness and an economy based on human dignity might, in fact, call for us to re-examine the materialism and consumerism that fuel the current economic system in the developed world. However, this is not to say that citizens of the developed world must resign themselves to a lower standard of living. There is a robust and growing body of work (much of it outside the realm of economics; for example, Robert Putnam's work in political science) which point to a richer definition of prosperity—one which accounts for human relations, civic engagement, social participation and leisure as part of our understanding of what it means to be rich.

As to this being romantic nonsense, I'd like to just point out that this college has been here for a long time. When Alexander Hamilton was a student here, if his fellow students heard a lecture about the moral imperative to end slavery, the reaction would have been that's great, but our prosperity depends on maintaining the system of slavery. When Franklin Roosevelt was here as a young man, had there been a lecture on the need to include women, children, immigrants under the umbrella of protection against exploitation, the reaction would have been that's great, but our prosperity depends on a pool of labor to produce affordable goods. In these cases, change did not come about because of technological or economic advances. Change came because

people began to think differently about allegiance and obligation; morality and the requirements of human dignity. I'd like to end my talk tonight with the Pope's words:

"The supremacy of technology tends to prevent people from recognizing anything that cannot be explained in terms of matter alone. Yet everyone experiences the many immaterial and spiritual dimensions of life. Knowing is not simply a material act, since the object that is known always conceals something beyond the empirical datum. All our knowledge, even the most simple, is always a minor miracle, since it can never be fully explained by the material instruments that we apply to it. In every truth there is something more than we would have expected, in the love that we receive there is always an element that surprises us. We should never cease to marvel at these things. In all knowledge and in every act of love the human soul experiences something "over and above", which seems very much like a gift that we receive, or a height to which we are raised. The development of individuals and peoples is likewise located on a height, if we consider *the spiritual dimension* that must be present if such development is to be authentic. It requires new eyes and a new heart, capable of *rising above a materialistic vision of human events*, capable of glimpsing in development the "beyond" that technology cannot give. By following this path, it is possible to pursue the integral human development that takes its direction from the driving force of charity in truth."
[paragraph 77]

Human Capital: case studies

Anujeet Sareen⁵

Below is the transcript of a talk that François Michelin gave in 2003 in Rimini, Italy. I thought that this talk offers a very meaningful example of human capital at work. As you may know, the Michelin company is a world leader in the tire market with 68 production sites in 18 countries, and 117,565 employees. The Michelin sales network covers 170 countries. In June 2009, the first half net sales was 7.1 billion Euros, which is about 10 billion US Dollars.

Excerpts from François Michelin's Address at the August 2003 Rimini Meeting

François Michelin: Thank you very much. First, I will introduce myself. My wife Bernadette and I are seventy years old. We had six children: the two eldest belong to religious orders. The other two are, however, married and we have eight grandchildren. It's true, I love the clouds, I find truly that they are an unfathomable extraordinary mystery. I've always been attracted by the mysteries, but I also really like cars, tires, and the idea of working in a factory, and accomplishing a task that I like. There were a number of tragedies that have occurred in our factory. My father was appointed director of Michelin in 1929 and died in a plane crash in 1932. There was another son, Piero, who was appointed manager in 1934 and that, sadly died in 1937 in a car accident. And then, of all people who knew Edouard Michelin, he chose from among these various people, Puisseau, one of his sons-in-law. [Editor's Note: Three years after this talk, Michelin's son, Édouard, his successor as manager of the company, drowned in a boating accident at the age of 42.]

My grandfather passed away in 1940, and Puisseau ran the management of the Michelin factories in those most terrible years, under extremely strong Nazi pressure. And he learned to say "no." Then, he also opposed the Americans, who said that they would provide the raw material for making industrial machinery for the factory provided, however, to be able to visit the factory. And he answered: "nein." The Germans, who we met after the war and who had known Puisseau, said he was a taciturn man. He was my mentor and in the 1950s was also a victim of a serious car accident. At that point he

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told me: "You have to absolutely work in the factory." And here I am. I have been in the business for 51 years, to be precise, in a factory, and I started making tires. I worked in the manufacturing plants, then I also worked in the sales department, I sold tires, I did research. But above all, I tried to understand what were the problems of interpersonal relationships between people working in a business.

Let's step back, back to 1938. I have these memories of my early adolescence. I was twelve years old and, together with my cousins, my grandfather allowed us to work, to handle wood and iron, to get, in whatever way, first hand experience. And here I met the personnel of the factory. And suddenly I realized that the label "blue collar" did not have any strict sense, that they were men, people, just like me, with qualities and defects. And so any notion of class suddenly disappeared before my eyes. This idea has been with me all my life.

I've told you what was my professional journey: Yes, I liked meteorology, I liked the clouds. I couldn't escape this request I had from Monsieur Puiseau who asked me to participate, to work for the company. But I immediately made it clear that it was not because of the fact of the name Michelin, but that I had to be good in the business. If ever I had not been able to work in a manner worthy of my name, they should tell me immediately. Since, however, I really like the automotive and tire industry, this choice has not given me any real trouble.

Moderator: I would ask you - perhaps you have already anticipated it - what was your first impression, your first thought about the world of business?

François Michelin: I have maintained excellent contacts with some colleagues in the school where we worked. I also met many in the industry and even outside the industry, and our conversations have always been extremely interesting. Because this kind of conversation can have a kind of stereoscopic view of life. Did I answer?

Moderator: Not yet! Coming from outside, although you have always lived inside the atmosphere of the factory, with what thought, what sense of responsibility, did you deal with this new phase of your life? This very difficult task, so heavy, as managing a company so big and complex.

François Michelin: The first thing I noticed is that nobody, in fact, was at the factory to earn their bread. That, in fact, the money in their paycheck comes from the pockets of the customer. Consequently, the true boss of the factory

was not me; it was the customer. Imagine a heavy stock of tires that you cannot dispose of. You then cut the tires into strips to pay the salaries. But I do not think that a butcher would take a piece of tire in exchange for a piece of meat. So the question that arose was this: what do you do to ensure that the client was driven to buy our tires? Then, we realized immediately that the point was quality. This was the key point. Does the tire that we make meet the users requirements? And, secondly, we must bring down, as far as possible, the cost.

So with these two elements, with those two pillars - quality first, price second - you already have all the elements that allow us to understand what the life of a business is, of an enterprise. In your opinion, what determines the shape of the blade of a plow? Is it the will of the farmer, or is it the nature of the soil, of the ground? It is certainly the nature, the structure, of the ground. Everything comes from the customer. And everything is raw material, with which the tires are made, all are of a part and they determine the life and sustenance of the company. The whole problem posed by the interpersonal relationships between the employers and the workers of the company derives from this fundamental notion. If the boss commands only because he has the title of boss, it is a catastrophe. While, however, if the boss is able to understand the problems and difficulties of the people who work, who handle the materials, and if he is able to find solutions to their problems then, yes, he is a true boss.

One always thinks of a company as if it were a great pyramid. It's the opposite: it is the customer who commands, and certainly not those at the top, the bosses that are at the top - I apologize, but journalists always define us like this. We are always put at the top of this pyramid, but no, we are just at the bottom levels. In Italy there is talk of managers and employees, but I wonder: who is the employee of whom? Who truly depends on whom? And I'm awaiting the answer.

Moderator: It is not the one who provides a salary?

François Michelin: No, because the salaries come from the work of all, of everybody. And if the work is done badly then there is no salary for anyone. Here the boss is directly dependent on the customer and, gradually, throughout the production cycle—from the production equipment to the manufacture of the final product—there is a whole set of dependencies that are created. You have to have a realistic view of things to avoid making absolutely catastrophic mistakes.

Moderator: I think one begins to perceive—as I perceived in the conversation with Monsieur Michelin yesterday—a vision that catches us a little bit off our guard than the dynamics we usually see and perceive. Imagine, then, I am a journalist. As Monsieur Michelin rightly said we have a really schematic view of things. Let me ask you: when we think of a factory, normally when we think of a factory, one firstly thinks of a place of conflict and opposition. One automatically thinks that. From the history, but also our way of thinking leads us to think that. I am surprised by your different view of the factory, which is also your experience, conducted in fifty years of working inside a factory. As the place of a communal creation. I want to see a deepening on this point, because I find it catches us off guard from our usual way of thinking.

François Michelin: One day, there was a strike at the factory in Clermont Ferrante. The factory was closed, and I still wanted to enter the factory. At the gate there was a union delegate who I knew a little, and who was distributing leaflets. I can't remember his name but I remember that he had two extraordinary blue eyes. We started to talk a little: "I will be brief, according to you, the boss is a worker, like you? The boss, in your opinion, works?"

"No," he says, "in my opinion, he is not a worker."

"Well excuse me, what should I tell my wife? What should I tell her that I do every day?"

"No, you are not a worker because you do not have the status of a worker," he responded. Then he said, "In short, you're not a worker because you do not receive a salary and, above all, you do not take orders. While, by nature, the boss is the one who gives orders to the worker, however, the worker must respond to these orders."

I asked him if he was really sure about what he said, and he insisted: "But of course, it's obvious."

And I replied: "Yes, but there's a strike at the factory."

And he says: "Yes, I know."

And I responded: "This strike gives me an order, and makes me understand that something does not work in my factory."

When Mercedes, Peugeot and others ask me for a specific type of product, a tire of a certain type, or even Fiat—

Moderator: And Ferrari?

François Michelin: And Ferrari also, that is a problem that is a bit more complex. When these big car manufacturers request of me a specific product, suited to their cars, they give me an order. We transform a large metal cable into a small metal cable, a wire drawing. If the machines are poorly designed, the filament breaks. So, here in this case, the raw material gives us an order, and tells us: "You do not understand how to manipulate. Resume the research; resume working." So, I also was a worker.

The truth is that the worker is in fact the boss of his machine and must take into account orders that are given by the raw material, which he is manipulating. The main progress that we have achieved in the factory in chemistry, in particular, is right in having understood why with some tires, certain alloys work better than others. Chemists are at the disposal of the chemical material. Chemists have not created atoms and molecules. Therefore we need people who want to truly understand, who love the research.

What is true in the context of technical problems, mechanical or commercial, is even more true in the human context. The question we must ask ourselves is this: "What do you do so that people work well together? Why are there problems, small problems between people? And why do I myself have difficulties?" We see quickly that there is not a unique answer. Because each one of you, even in this room, is unique and unrepeatable. In the history of humanity you will not find a person like you, the same as you. That's why we have this attitude, this frame of mind that allows us to listen to people who work and live around us. In every human being, beyond the surface, beyond the appearance, there is a diamond that we may be able to discover together.

There are, in our trade, different tasks: there is one that is called "tire packaging," there's the driver, there is an engineer, but you must be able to look beyond the label of surface. Avoid labeling people by what they do, but understand who they are, go beyond their reputation. I will give a concrete example: the engineer who invented the radial artery, which has revolutionized the tire industry in the world, entered the factory as a print worker, who we put in the print shop. But personnel managers quickly realized that he had the qualities that went far beyond this very simple task. He was made to do other things, and we then saw that he had a fantasy that was absolutely rampant. (Fantasy, perhaps, is a bit different in French. Imagination, let's say). Unbridled imagination, but also a character that is

extremely tenacious, stubborn. And this has enabled him to make this and other extraordinary inventions. So the question we always ask ourselves is this: "Who is the person with whom we are dealing? What are his strengths, what are his shortcomings?" It is a fundamental question we must ask ourselves every day, because tomorrow morning will not be like today, and neither will I be the same. We need to constantly look at what is happening around us.

Mother Teresa said that one day in a gutter in a street in Calcutta she saw something, a bundle that vaguely resembled a human being. She went over and it was a woman who was dying. This dying woman told Mother Teresa, "It is the first time that someone considers me a person." We are all basically on the street, in our gutter, with our nice label on our jacket. I will cite a personal example: You look at Monsieur Michelin, and immediately you think of preconceived ideas and clichés. But if you wanted to know who François Michelin is, it's a whole different kettle of fish. Who is François, without the Michelin, only François as a person. This goes for everything: if you see a trade unionist and you consider him only as such, you can not see anything about him.

One day, during a funeral, I found myself next to a leader of the CGT trade union, a retired union leader. I must say that I did not recognize him, because I used to see him always dressed for work. And he told me: "Well, Monsieur Francois does not recognize me anymore?"

And I said, "Ah, Monsieur Jacson!" Chatting, I also said: "Too bad we failed to do things together."

And he replied: "True, but I was not able to help."

If I had seen him at that time as a former union leader, maybe I would not even have stopped to talk with him. But no, I saw him another way, I saw him as a man. I must say that, in certain situations during a strike, he showed himself extremely effective. This goes for politicians, for journalists, for interpreters. Why you may have noticed that the interpreter has a heart (Interpreter: "true"). Did I answer the question?

Moderator: Yes. But I quickly have another one. I will admit, Monsieur Michelin, you are a figure of a businessman somewhat strange or otherwise different from what we normally think of as a businessman and of whom I, in my professional life, meet frequently. You talk about people, not roles, and we think of the factory and the organization of work as essentially an organization

of roles. And you speak of diamonds hidden in people. Speak about this reality, the reality of the customer, the reality of raw material. It's hard to hear someone talking about raw material with this passion, with this knowledge, with this competence: for this raw material which determines the method of work, determines the organization. And this is very interesting, and I permit myself to say that it is also a bit unusual. Do you feel like a person who is very different from the system?

François Michelin: I do not care at all. It would be like saying that I disagree with the color of my eyes.

Moderator: But what do you think of your fellow businessmen? You know many, right? Also because I know that Michelin does not have good relations with the French Industrial Confederation, with the association of French businessmen.

François Michelin: I have some difficulty answering you because it is a quasi-political issue. But I will try to answer without falling into the trap of politics. I remember in '66 that the CNPF, that is the French Industrial Confederation, had issued a very pompous statement, saying who was and who was not a businessman. I could not find in this document the term consumer or customer. Some years later I met one of the French Industrial Confederation leaders, who scolded me saying: "We absolutely cannot admit to being somewhat controlled by our customers and the consumers." It was a sort of humiliation for him. From there, obviously, descended a total opposition to what the French Industrial Confederation said, because for us it was a stronghold.

This was the basic problem, then there was a second problem, namely that the CNPF never wanted to talk to shareholders. The shareholder is not reactionary [there's a play on words with the French that is not translatable]. Without the shareholder, there is no money, no factory, there is nothing. Unfortunately, as we know, the fact is that companies need to have strong liquidity, money. And what do you do? It calls for a capital increase. You ask someone to contribute with money which, among other things, will never draw more, if you do not ask the shareholders. Do you play the numbers with borrowed money? The answer is no. Do you hire an engineer with incredibly good ideas, of excellent quality, with the borrowed money? The money borrowed must be repaid, with interest. When you find people like shareholders, who are quite "crazy" to invest money and expect a return on this investment, based on the growth of the company, well, we are thankful for

these people. Who has not had the ordinary experience of wanting to buy or build a house, going to his bank, and being asked, "What guarantee do you give me?" The extraordinary industrial growth we have had in Europe in recent decades has to do with people who took this financial risk, this economic risk. This type of risk, it is the shareholders who have decided to support it. A trade union has never created a business.

Moderator: There is a question...

Question: I wanted to ask this: Regarding the new leaders, the leaders of today, Do you think that they are in a right position towards their own employees, towards the people who work in a factory, or do you find a difference between your thinking and that of the new leadership?

François Michelin: Life in society is possible only if each of us understands the intentions of others. If you speak from the perspective of the manager of a company, the boss: If the manager of a company, the owner, is able to express clearly and convincingly that the customer is our true boss, that the materials are stronger than us, and relationships that are created within the group are important, this would be the ideal. I have committed many mistakes in my life as a boss, in technical choices, but unfortunately, I very much more regret those that regard relations with personnel. But people have always said, "You did wrong, you probably have done wrong, but you did not wish to do it, you did not have the intention of doing so." The correctness of the intention in some way repairs the mistakes made. I believe this is the answer to your question.

Question: What I meant to ask was this: The personalities of today, that is, the leaders of today ... I was wondering if you found an affinity with your thought, that is, your way of directing that you used in all your years of leadership, or do you find that these people have different values, different ideas. So do you find, or not find, this affinity in the new generations of leaders?

François Michelin: Just before I had responded to a question by saying that I do not care. My job is to disregard the fashionable ideas, the circulating ideas, but to see what is really useful for the activity that we carry forward. Many business executives living in Paris and, therefore, inevitably, are surrounded, filled, with the fashionable ideas. My office, however, is in a factory, and every day I am in close contact with the personnel of the chain assembly, of manufacturing, etc. We meet in the factory, within the perimeter of the factory

and chat. This is not possible in Paris. I think that many business executives, many owners, think what I think, but do not have the courage to say so. This, perhaps, is the right answer to your question.

Question: I wanted to know if you ever fired anyone, and what are the conditions for a dismissal.

François Michelin: If I were the boss of Manchester United, according to you, and the goalie was really incompetent, what should I do? Should I keep him or not keep him? It is, naturally, a bit of a provocative image, a little forced. Take the example of a dismissal that is not dictated by economic reasons, but just because that person does not have the qualities, the skills, and in some way hurts our company, causes harm to our company, for a variety of reasons. The first thing to do is to call him, to meet with him and say, "This will not do, let's talk. You absolutely must improve your performance on a number of points. We believe that you are able to do so because you have the ability and the intelligence." And if this person continues to do nothing, you make the decision to fire him, you know? The company needs teamwork; it is a team. Often the shareholders decide to get rid of the managers because they are not doing their job.

Certainly firing someone is painful, really. I've done it at times. One day I met in France a Labor Minister, and he was talking about the issue of layoffs. The conversation was a bit strange, a bit cloudy, and I could not understand exactly what he said. He was a Socialist minister, but he could in any case have been a minister of the Right. I told him: "I think you believe that the owners take a sadistic pleasure in dismissing their employees." And to this question I did not get any response. I find that silence to be a terrible answer.

We find this basic phenomenon, worldwide, but it's more European today. We talked about it before, namely that the company is considered a place of conflict, confrontation, opposition, disjointed. There are the managers, there is the personnel, there are the customers: all with no contact. But this, really, is contrary to reality. This derives from the Marxist philosophy that does not accept that man also has a spiritual dimension, that each of us is important in his work, his own job, and that we must necessarily seek to understand one another. And it is the liberation that comes from communion.

Moderator: Heading towards the conclusion of our meeting, I would like to ask if Monsieur Michelin, in fifty years of intense life in the factory, has never been tempted to leave, to abandon it. Are you never tired?

François Michelin: Certainly, like everyone else.

Moderator: And you did not do it. Why?

François Michelin: I do not know. My father once told me: "All black clouds have a silver lining, and never forget that men and women have enormous personal resources." And when I wanted to drop everything because I'd had enough, I went to see the staff working in the departments and, without bothering to read statistics, internal reports, documents, etc., touch the tangible reality and practically regained the strength to move forward. I could not do any of this without my wife Bernadette.

As we conclude this four part seminar on human capital, I would draw your attention to two themes that carried through all of the sessions we've heard these past few weeks. The first is a recurring emphasis on broadening our use of reason. This began with Bernhard Scholz correcting the common definition of human capital: "it is often wrongly defined as all the people who work inside a company or within a nation, a new translation of "human resources," as the counterpart of financial capital. Instead, I would define the term "human capital" as the set of knowledge, skills and abilities acquired, and those still incompletely expressed or even those that have not been discovered yet, during the life of an individual who seeks to achieve social and economic goals." Indeed, human capital often works in the exact opposite way of physical capital – while a production facility depreciates over time, human capital can improve and expand over time. We're talking about human beings – our capacity to learn, expand, innovate, and create is not merely evident in what preceded someone's date of hire. And the reason for this is human desire is what drives our engagement with reality, including work.

In the second lecture, Professor Freeman challenged our reason to expand further when we think about human capital in the sphere of economics. He specifically went after the notion that economic self-interest is the sole driver of economic exchange. His wonderful thought experiment, asking everyone in the room to split into pairs and negotiate a deal with 10,000 imaginary dollars, was particularly illustrative. We simply do not move based on pure self-interest alone – our humanity is fully present in work, as it is in other areas of our lives. We cannot understand economics if we don't begin with how the entire human being is engaged in work and economic exchange.

Dr. Shankman, in the third lecture, focused significantly on this issue of broadening reason, because this has been precisely Pope Benedict's focus in his papacy, in his recent encyclical, in his speech at Regensburg, and on many other occasions. "Pope Benedict may be considered the "epistemological pope". What we can know, how we can know, and the proper scope of our power of reason are all topics that he addresses over and over again, in a variety of contexts...Beyond the academic realm, the influence of science as the normative mode of reasoning has spread throughout the culture. The result has been the division of the objects of thought into the realms of "fact" and "value", with the assumption that only questions of fact are relevant subjects of public discourse...The pope is asking us to consider two words not normally associated with economic policy. He is challenging us to examine our fundamental presuppositions – that charity is a sentimental impulse outside the sphere of economic analysis and that truth is a vestige of an outworn epistemology."

In his delightful interview, Francois Michelin also seemed to expand the use of reason in the business world. We're not talking about "soft" issues of business management – he makes it very clear that his business begins with reality – without the customer, he has no business, so naturally he places a premium in following his customer. He also recognizes that his job is to follow his employees, because also without them he has no business. And, in fact, following his employees, in a fully human way, means to see in each of them the potential for something more – as he indicates from his example of the engineer who invented the radial artery. He is just as realistic when he recognizes how the providers of capital, the shareholders, have been essential to the growth of the business. Michelin does not come across particularly ideological, refreshingly, - he is a man focused on the issue of human capital that expands our use of reason.

The second theme that carried through the last few weeks was the fact that human beings are, by nature, relational. As such, the human capital of a company cannot be understood as simply the collection of individual skills sets. Scholz said "In all of these organizations, no one can "do it on his own," but each can make a contribution according to one's skills and personal knowledge." He then asks "How is it possible to really express one's abilities, to really follow one's desire, through a participation that only "makes a contribution" without, instead, making a "complete" work?" He answers "The first condition which gives dignity to every person's job and to each employee is the clear and transparent statement of common goals and principles which support and define their many responsibilities. It is only when I know the content of my work and the common purpose to which I am devoting myself that my work acquires a real value and allows me to establish a relationship of trust between myself and other employees. Also, the opportunity to serve in a great "cooperation" becomes a true appreciation of your own person. Something much deeper is reflected in this experience: If we look at

human life as a whole, we realize that everyone has collaborated in the real history of the world, and that all that they need comes about through a cooperation, without which none of us would even have food and clothing. We live in a large network which only and ideological individualism has been able to reduce to an isolation which seeks the other person just for a few fleeting needs but not for a real sharing.”

Professor Freeman really focused on the role of trust and trust mechanisms. Without trust, so many business relationships and structures fail. Much of the seizure in markets last year reflected a collapse in trust, despite the increasing sophistication of financial instruments to hedge risk. His focus on the success of microfinance in emerging markets, particularly the story of Suffia Begham, was very interesting. Muhammad Yunus won the Nobel Prize in economics because of his insight of one of the most basic elements of human relationships, trust. Professor Freeman urged us to think about what builds trust, more deeply – that it shouldn’t be an afterthought in economics.

Dr. Shankman also explored this relational element of human capital in her synthesis of the Pope’s latest encyclical. She sees the Pope challenging the prevailing notion of human self-sufficiency. “the system is driven by a vision of human personhood that is based on both isolated individualism and the assumption of self-ownership.” Instead, the Pope says “the truth about the human person –the fact that we are not owners of ourselves but stewards of gifts, talents, and blessing that we did not create- points inexorably to the necessity of charity as an integral component of all human relations, including economic relations.”

Francois Michelin said “Life in society is possible only if each of us understands the intentions of others. He speaks from the perspective of the manager of the master: If the manager of a company, the owner is able to express clearly and convincingly that the customer is our true master, that matter is stronger than us, and the relationships that are created within the group are important, this would be ideal. I have committed many mistakes in my life as a master in the technical choices, but unfortunately, I regret very much more, as regards relations with staff.”

I hope what became evident in this lecture series is that a broader use of our reason to look at human capital is entirely consistent with the purpose of business. Successful economic enterprise, a more fulfilling experience of work, regardless of our position, is possible when we look at human capital in a more complete way, so that there is no division between our human desires and our capacity for work.