

# The Future Economic Consequences of Commoditization

Ryan, John

Center for Economic Policy Analysis, University of Venice

5 September 2009

Online at https://mpra.ub.uni-muenchen.de/17321/ MPRA Paper No. 17321, posted 16 Sep 2009 19:10 UTC

# The Future Economic Consequences of Commoditization

# Andrew Holmes, Partner, Paricint and Professor John Ryan, Center for Economic Policy Analysis, Venice

## Abstract

Predicting the future is an imprecise science, and something that should always be carried out carefully and the results should be taken with a pinch of salt. That said it is sensible to assume that most of the drivers of commoditization are likely to remain in force for the foreseeable future. Unlike the futurologists who attempt to predict how society and technology will change over the next fifty years, we are only going to look a few years ahead, which is a more sensible time horizon. History is not always a good predictor of the future, but in the case of commoditization we think it is. It is clear that when we look back in time we can see how the process of commoditization has subsumed great tranches of industry, eliminated significant numbers of manual labourers and increased the general efficiency and effectiveness of society. In many respects we could argue that it was important to the advancement of the industrialised economies of the West. In projecting forward from this point, we should expect commoditization to continue to expand its footprint into areas which we currently think are outside of the realms of possibility. After all, no one would have expected the IT industry to have become so commodifized when it first emerged during the 1940s. And in the same way that white collar workers were caught out when they believed they were immune from the initial waves of downsizing and offshoring that affected the manufacturing sector, others at the mid- and high-end of the workforce may also be caught out sometime in the future. And as commoditization continues to advance it will touch on many more peoples' lives and livelihoods.

#### Keywords

Commoditization, Offshoring, Talent, Technology, Competition, Inequality **JEL Codes** A10, D21, D23, D24, D40, F02

#### **Technology – squeezing work at every level**

Although it might take time before high-end work is fully commoditized, the same cannot be said of the mid and low end activities of the workplace. In fact we should expect the routine work undertaken by the average white collar worker to be squeezed out of existence, or reduced to the bare minimum required to ensure that people are on hand to deal with the occasional crisis. This process of commoditization is being driven by a combination of process standardization, improved interconnectivity between IT applications and the availability of a cheaper workforce overseas. Although standardising process and having a cheap and capable labour force are important, key to the changes we are witnessing is the capability of technology, as without effective and connected systems it would be almost impossible to move any work offshore or take advantage of the capabilities of workers from different geographies. The relationship between technology and the elimination and offshoring of work is also circular; as technologies improve through the intellectual efforts applied by those that develop and advance them, it becomes easier to move the location of that labour to other locations across the world, something not lost on the IT industry. Moreover, as technology improves it leads to a greater instability in the working environment and increases the level of uncertainty for both physical labour (as we witnessed in the Industrial Revolution and more recently with the manufacturing sector) and knowledge based labour (as we started to see in the 1990s and of course now)<sup>1</sup>.

Today it is possible for the transactional activities of an organization to be performed by technology and moved to outsource service providers and increasingly offshore. Over time the focus of technology will shift away from the most obvious targets associated with transactional activity to first the removal of process intensive activities and finally to the non-critical decision making activities which can be aided by effective data mining and business intelligence software (figure 1). The embedded intelligence within technology is creating smart systems that over time will become more efficient and cost effective in eliminating the low end activities which are narrowly defined such as customer support (queries, order processing etc.). The logical extension of the continued improvements in technology is for all labour to become a commodity. In the same way that blue collar labour has become commoditized and offshored, white collar work will become a commodity as organizations continually shift labour from country to country in order to exploit the differences in labour costs<sup>ii</sup>. The smarter technology becomes the higher up the food chain commoditization goes. And as long as we have scientists and technologists pushing the envelope of technology, this process will continue. For example in approximately five years from now, computers will be able to read and tag the news stories and information emanating from the myriad of newspapers and agencies across the globe. So what you might ask, but this is the same information that is currently used by the highly paid traders in the stock exchanges throughout the world and if this technology is as good as they believe it will be it could potentially make them obsolete, saving their employers literally billions in salaries, bonuses and share options. In a commoditized world, anyone whose job is defined by or involves a significant use of computers is at risk of downward mobility<sup>iii</sup>.

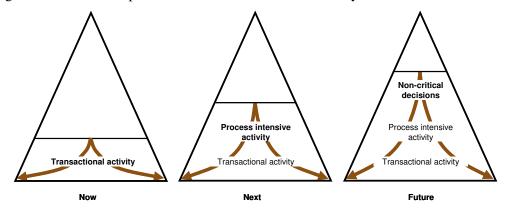


Figure 1 the shifting focus of technology

Where it will end is a question that is on an increasing number of workers' lips and surely there will be some work that can avoid the commoditization trap. Work which requires innovation and high intellect may be safe as removing this from the core of the organization may be a step too far. But this will not stop companies from attempting to reduce the reliance on expensive resources and eliminating the need for human contact through the use of new technologies; it's inevitable in an increasingly commoditized economy.

### The extreme worker and the war for labour

As time marches on, the local pools of talented staff on which organizations depend are expected to dry up because of the aging of the population and the constraints (political, as well as physical) imposed on immigrant labour. For those with the skills in demand the future is bright and it may not be long before we begin to see job auctions emerging in which the most talented in society open themselves up to the highest bidder<sup>iv</sup>. Indeed we are already witnessing the growth in the income share which is accruing to the top 0.1 per cent of workers. According to the OECD this reflects the effects of globalisation which is creating opportunities for a small elite cohort of workers<sup>v</sup>. Being the most talented will bring some very high rewards, which for some can mean calling the shots and enjoying a lifestyle that will be increasingly out of reach for the majority. But at a personal level such high incomes won't come cheaply. Extreme jobs in which employees are required to work exceptionally long hours whilst juggling immense and conflicting responsibilities in order to both justify their high incomes and to service their global clients may not be new. After all we all know of workaholics who will literally sacrifice their entire life for their career, but such jobs may well become the norm for those with talent who wish to stay on top of the career ladder.

Extreme jobs may entail 100 plus hour work weeks often spanning the weekends. We see this today within the investment banking community. Fresh-faced graduates enter their banking career by putting in 100 plus hour weeks for at least 24 months<sup>vi</sup>. The same is true of the legal profession, which continues to be associated with gruelling schedules, fairly dull work and little work life balance<sup>vii</sup>. Some of the reasons why we will see an increasing number of extreme jobs include<sup>viii</sup>:

• The intensification of competition. Over time the number of promotion opportunities for staff will diminish as hierarchies flatten the impact of mergers and acquisitions eliminate senior roles, as new workers (often immigrants) join the workforces who are willing to put in inhuman hours to get on and work is offshored to save costs.

• The cult of the extreme. It can be very difficult for executives to demonstrate their

worth to themselves or those around them without some outward evidence of their long hours, much of which remains invisible. So in order to increase the visibility of the sacrifice they make, the extreme worker is increasingly being equated to sports superstars; investment bankers will brag about the deal they have just pulled off against all the odds and at massive personal cost in the same way a base jumper will after they have completed a particularly dangerous leap.

• Technology is a significant factor in the intensification of work. Increased connectivity between client and service provider and boss and subordinate means that those in extreme positions will rarely escape the office. In fact they will become the office, always accessible no matter where they are or what time of day it is

• Work replacing home as the new social centre. The loss of social capital because of the increasing hours spent in the office means that, for many at the high-end of their professions, work will be their social life; it's where they build the majority of their relationships (albeit superficial and one-dimensional) and where the few friends (or perhaps acquaintances) they have reside. Many extreme professionals prefer to be at work than at home, where they feel alien and unneeded and generally unsettled.

• The shift to knowledge work. In the past it was possible to down tools at the end of a shift and pick up your social life. In the modern corporate world which employs brains not brawn this is no longer the case. And unlike manual labour, knowledge work is never done because there is often no physical product at the end of it

• Globalization. The most successful organizations are those which can attract the best and brightest talent and very often these are the global players who have the necessary complexity required to keep the extreme worker focused, engaged and busy. Addressing the challenges presented by overseeing global operations spanning multiple time zones requires long hours and being on call for 24 hours a day; just what the extreme worker enjoys.

But there is a cost and this can be significant, as a recent survey of extreme workers by the Centre for Work-Life Policy found. The survey found that 45 per cent of executives were extreme workers putting in more than 60 hours a week and meeting five other criteria which included being on call 24 hours a day, facing demands from several time zones and meeting ever more demanding deadlines. Extreme work takes its toll on workers' health, relationships, marriages and many other aspects of their non-working lives. Issues such as lack of sleep, burnout, depression, lack of exercise, alcohol and substance abuse and marriage breakdown are increasingly common amongst this cohort of the working population<sup>ix</sup>.

However, there is more to staffing than just talent. And despite the current focus on the war for talent, which is of course critical, what is missing is a similar emphasis on those workers who are required to perform the more routine duties and who very often are expected to act as the interface between the business and the customer. As the impact of commoditization reaches deeper into the rank and file of the white collar worker, more and more people will be expected to undertake less demanding and interesting roles. The problem with this is that if the work isn't interesting there is little to keep the employee engaged in the company or its strategies apart from a pay cheque which may be somewhat stagnant and may even be reducing in real terms.

The possibility of an unfulfilling working life as part of the many living dead frequenting the workplace is very real and we should all take David Bolchover's view of office existence very seriously<sup>x</sup>. When this happens, staff turnover and absenteeism will undoubtedly increase and levels of motivation and commitment decrease as the swelling ranks of the underemployed lose their work ethic. The problem of course is that this will impact the bottom line, as employees lose their focus on what's important to the organization and what matters to the customer. Therefore it may become difficult to maintain service levels and institutional knowledge. Such problems already beset call centres and the low end service economy jobs, where staff will move to another employer at the drop of the hat especially if it involves more money. They will also be off sick more often and have a poorer attitude to work than their extreme worker colleagues. Instead of working at the top of Maslow's needs hierarchy they work towards the bottom, where the basic needs take on a greater significance. With work holding little or no interest and employers focused on their most talented these workers will move to whoever will pay them the most. Loyalty is lost and the ability to maintain a cohesive and high performing organization becomes increasingly difficult. Organizations that fail to look after their low level employees will lose ground to those that do. What is needed is a renewed interest in these employees and although they may not have the same opportunities as the most

talented, they still need to be looked after, challenged, led and motivated. The emergence of a labour war is something to guard against and with an appropriate focus on all employees, not just the cream of the crop, organizations will be able to address the challenges commodifization presents more effectively.

#### Increasing income inequality and its effects

Work and the workplace have always been unequal. No matter what the pundits, Human Resources or academics might say about meritocracies they rarely exist in their pure form. Whenever an organization is stripped bare, unless it is within government, you will find significant variations in what employees are paid even within the same grade or job role. We are already seeing the highly educated workers pulling further and further ahead and the less educated falling further and further behind, but this hides the true fact that it is only the top ten per cent of the employment pool who are truly excelling and enjoying significant wage gains.

It is clear that income inequality is both rising between skilled workers as much as between the skilled and unskilled cohorts of the workplace<sup>xi</sup>. Indeed, inequality is even increasing between those knowledge workers with similar skills and capabilities. As we move towards a high-skill, low wage economy the process through which this happens will not be uniform in that those who find themselves in senior positions and who are able sell their knowledge and insights to global businesses will be highly rewarded, even when those with the same expertise come under the wage pressures familiar with the lower end of the service economy<sup>xii</sup>. So whilst many knowledge workers will prosper, many will not. But before we look at impact that such income inequalities have on people and particularly their health, it is worth reiterating why income inequality is likely to increase over the coming years. Stagnating salaries and real drops in income (downward mobility) are very real and are already affecting an increasing number of white collar and professional employees. Companies in response to the threat of commoditization and increased competition are hollowing out as they routinise work and then eliminate it using a combination of technology, outsourcing and offshoring. This trend will undoubtedly continue and as it does so the incomes of those who undertake such work will drop either because the role no longer offers a premium salary (because it requires less skill, is less complex and has been suitably codified to allow others with less knowledge and expertise to perform the work instead) or because they are forced further down the service economy's hierarchy as the good jobs dry up. Increasingly it will be the middle classes who share the economic pain and a few, perhaps no more than 20 per cent of the workforce will continue their upwardly mobile path<sup>xiii</sup>. As most of the safety nets disappear the future of today's and tomorrow's workers will become increasingly precarious. The other problem that the well educated professional classes have to contend with is the fact that many of the skills they need to excel in today's workplace are increasingly risky investments. Although necessary and often costly to develop they can become obsolete almost overnight as the economy and the job families on which it depends shifts leaving those with outdated skills with few opportunities for applying them elsewhere<sup>xiv</sup>.

As income distribution bifurcates between the minority who are highly paid and the majority who are not, the impacts of inequality will be more widely felt and especially amongst today's middle and professional classes. What is also interesting about income inequality is that in those countries where it is higher, there tends to be longer working hours<sup>xv</sup>. One can only guess this is to make up for lost ground, or to show the boss that you are truly committed to your job. The other point to make here is that growth in countries with high income inequality is slower than in those with lower levels of income inequality<sup>xvi</sup>. So even from a simple economic standpoint such variations in income seem to inhibit not accelerate economic growth.

The collapse of the communist regime is a prime example of how an increase in economic individualism not only leads to a widening of income differences but also a rise in the wider problems of society, such as crime, illness and social exclusion. It should come as no surprise that we are already seeing some of these impacts as the early effects of commoditization begin to play out across the industrialised economies of the West. Of course, such changes are not only affecting the West as some of these effects are now being visited on the growing economies of India and China where the gap between the highly paid and the average worker widen. Many amongst the middle and professional classes of the West are finding it difficult to stand still, let alone improve their lot in life and a significant minority have been borrowing against the value of their real estate in an attempt to maintain their lifestyles. Over time we

should expect these problems to increase as the winner takes all meets the loser gets none economy. The question is of course, what to do about it. These are macro issues which require national interventions, but in a market economy, governments do not have the appetite to address the problems of those further down the income scale. And because such people lack the skills needed in the workplace they can be easily abused and pushed around; over time a greater number will opt out of the economy and society altogether because they see no future ahead of them. This is especially the case amongst the young. For example, in the United Kingdom there are currently 1.24 million people aged between 15 and 24 who are neither in education, work or a training scheme, a 15 per cent increase since 1997. This sets up a cycle of deprivation that can be near impossible to escape from<sup>xvii</sup>. Furthermore it is not only those at the bottom of the income scale who will suffer (as they do now), but it will be large numbers of the middle classes who will be finding themselves gradually pushed towards the edges of the economy as their lives become more uncertain and insecure. Unfortunately, the sad truth is that insecure workers tend to under invest in their skills, are more reluctant to change jobs and try to minimise their sense of job commitment to insulate themselves from the psychological loss when the work dries up<sup>xviii</sup> which further compounds the problems of inequality.

#### The emergence of the vicious cycle

With the backdrop of widening income inequalities and an increasing number of previously well paid employees finding their income falling it is easy to see how commoditization can create a vicious cycle which may be difficult to break.

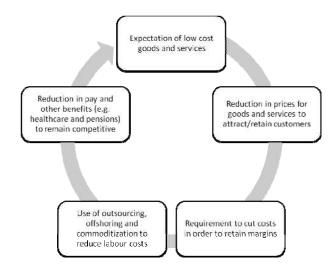


Figure 2 the vicious cycle

As we can see from Figure 2 which illustrates this vicious cycle as it affects goods, services and the pay and benefits of the workforce, companies which have to reduce their prices (in real terms) in order to attract new customers and retain their existing ones have to recoup their lost margins elsewhere. This is typically achieved in one of three ways: they can increase the productivity of their staff so that they produce more for the same cost, they can create internal efficiencies using a mix of process redesign, technology and restructuring, or they can use outsourcing and offshoring to lock in lower costs and in this way treat their staff as a commodity. Although the first two options are often pursued by most organizations, there is a tendency for the costs to creep back up again, especially if management lacks the cost focused disciplines of the low cost operators. This makes the third option more attractive and once this has been chosen it becomes much simpler to both move additional work overseas and shift where the work is executed as new opportunities to shave their costs and hence improve margins materialise.

Over time the number of organizations exploring and opting for this third option will increase with the continued advances of technology especially in terms of its ability to connect remote workers. This shift to the outsourced and offshored model generates a downward pressure on the pay and benefits of staff because the very threat is enough for people to hold back on their pay demands. There is mounting evidence to suggest that increased volatility in labour demand is leading to moderation in the bargaining power of workers<sup>xix</sup>. Many employers are using the threat of offshoring to gain agreement to such reductions which not only include limiting salary increases and reducing pay, but also targeted reductions in headcount and benefits such as pensions.

Left with limited choices, especially those who lack the transferable skills required to adapt to the changing workplace demands, most will cave in under the pressure; better to have a reduced income than no income at all. We can see this in action with Wal-Mart who drives their Chinese suppliers very hard to produce their products at the lowest possible price (see below). If a supplier is unable to meet the demands made by Wal-Mart, they will lose the business and in such a cut-throat environment, many have no choice but to cut workers' incomes, increase their hours and make them work in sweatshop conditions<sup>xx</sup>. With less disposable income employees will expect cheaper goods and services and in the main will have little choice but to seek them out. If retailers and service providers put their prices up, the consumer will hold out for price reductions or find someone else that matches their price expectations which these days will undoubtedly include the Internet. In fact as peoples' incomes go down the demand for cheaper goods and services goes up, which of course adds to the pressure to reduce costs. With the modern economy dependent on the service sector and consumers for its smooth running, it is easy to see how the vicious cycle of figure 2 is perpetuated. Once locked into the cycle it takes a brave company to buck the system and, there are limited options open to you when battling low cost competition. One thing seems to be clear, especially if you listen to commentators such as David Bosshart, author of *Cheap*?<sup>xxi</sup>, and that is that the cycle is here to stay.

A microcosm of what the future may hold is already playing out before our eyes in the shape of Wal-Mart. Although Wal-Mart can be held up as an excellent example of an organization that thrives within the commoditized zone, one of the biggest complaints laid at its door is its unwillingness to pay a living wage to its employees and provide suitable medical cover. For example the Wake up Wal-Mart campaign, funded by the United Food and Commercial Workers Union is aimed at mobilising protests against the retailer in order to force them to begin to pay staff a decent income<sup>xxii</sup>. In the late 1960s the biggest employer in the United States was General Motors and they paid their staff on average \$29,000 (in today's terms) together with generous pension contributions, healthcare and other benefits. Today Wal-Mart is the biggest employer and they pay their staff \$17,000 on average with few if any benefits. When employees are paid near or below the minimum wage, they can only afford to spend their hard earned cash at Wal-Mart or the other retailers who mimic them; they just can't afford to shop elsewhere. Other companies are increasingly finding that they have to follow Wal-Mart's lead in that the benchmark "China price" has to be beaten by those at home if they are to stand any chance of avoiding work going overseas. When you consider that this China price means producing something of between 30 and 50 per cent of what it normally costs, it is easy to see the pressures this creates. Wal-Mart and companies like it exert such extreme pricing pressures on their suppliers that the vicious cycle ends up spilling over into the wider economy as executives of the organizations affected face the stark choices of shrink, close, or move to China<sup>xxiii</sup>.

#### The end game

The combination of demographic change, immigration, technological advancements, the availability of an increasing number of graduate level workers and the resurgence of China and India are forcing companies to consider the impacts of commoditization on their operations and markets and respond accordingly. The choices are not necessarily straightforward, but there are choices all the same. Whether to pursue a path focused on innovation, or one which tackles the cost issues associated with commoditization head-on or a combination of both is a decision that needs to be made in the boards of every corporation. The pressure to simplify, standardize and ultimately eliminate unnecessary work out of the system will increase as those organizations who manage to address the challenges will add to the competitive forces

and make those companies that fail to respond increasingly untenable. It is also clear that the process of commoditization will continue for some time to come and may well accelerate as the Boomer Generation finally leaves the workplace. What the end game will look like is a little more difficult to predict, but like so many changes that have affected the workplace and society in the past, there will be winners and losers, although on this occasion the losers may well outnumber the winners by a wide margin. Sitting on the sidelines and watching the commoditization juggernaut steam towards you may not be the best strategy, but many will have little choice but to watch and wait for the inevitable collision. <sup>ix</sup>Hewlett, S., and Buck Luce, C., (2006) Extreme jobs: The dangerous allure of the 70-hour workweek, Harvard Business Review, December, p 54.

<sup>x</sup> Bolchover, D., (2005) The living dead, (Chichester: Capstone)

<sup>xi</sup> Hacker, J., (2006), The great risk shift, (Oxford: Oxford University Press), p 64

<sup>xii</sup> Brown, P., et al (2006), towards a high-skilled, low-waged economy? A review of global trends in education, employment and the labour market, in Porter, S., and Campbell, M., (eds) Skills and economic performance, (London: Caspian Publishing), p 73

x<sup>iii</sup> Brown, P., et al (2006), towards a high-skilled, low-waged economy? A review of global trends in education, employment and the labour market, in Porter, S., and Campbell, M., (eds) Skills and economic performance, (London: Caspian Publishing), p 82

<sup>xiv</sup> Hacker, J., (2006), The great risk shift, (Oxford: Oxford University Press p 75

<sup>xvi</sup> lbid, p 113

<sup>xvii</sup> Browne, A., (2006) No school, no job for record numbers, The Times, December 11, pp 1-2

<sup>xviii</sup> Hacker, J., (2006), The great risk shift, (Oxford: Oxford University Press), p 178

xix OECD (2007), Employment outlook, p 120

<sup>xx</sup> Ryan, J., (2006) Wal-Mart and China: Boon or bane for American interests, European Business School occasional & working paper series, no. 3, p 19

<sup>xxi</sup> Bosshart, D., (2007), Cheap? The real cost of living in a low price, low wage world, (London: Kogan Page)

xxii Birchall, J., (2006) Democrat leaders join fight against Wal-Mart, Financial Times, November 15, p11.

xxiii Bianco, A., (2006) The bully of Bentonville, (New York: Currency Doubleday), p 15.

<sup>&</sup>lt;sup>i</sup> Betancourt, M., (2004) Labour/Commodity/Automation A response to "The digital death rattle of the American middle class: a cautionary tale, ctheory.net, p11

<sup>&</sup>lt;sup>ii</sup> Betancourt, M., (2004) Labour/Commodity/Automation A response to "The digital death rattle of the American middle class: a cautionary tale, ctheory.net, p 7

<sup>&</sup>lt;sup>III</sup> Hacker, J., (2006), The great risk shift, (Oxford: Oxford University Press), p 78

<sup>&</sup>lt;sup>iv</sup> Canton, J., (2006), The Extreme Future, (New York: Dutton), pp 97-98.

<sup>&</sup>lt;sup>v</sup> OECD (2007), Employment outlook, p 117

<sup>&</sup>lt;sup>vi</sup> James, O., (2007), Affluenza, (London: Random House), p 7

vii Parsons, S., (2007), Children are right to ignore their prescribed futures, The Times, July 5, p 2-7

<sup>&</sup>lt;sup>viii</sup> Hewlett, S., and Buck Luce, C., (2006) Extreme jobs: The dangerous allure of the 70-hour workweek, Harvard Business Review, December, pp 49-60.

<sup>&</sup>lt;sup>xv</sup> Frank, R., (2007), Falling behind: how rising inequality harms the middle class, (Berkley: University of California Press), p 78