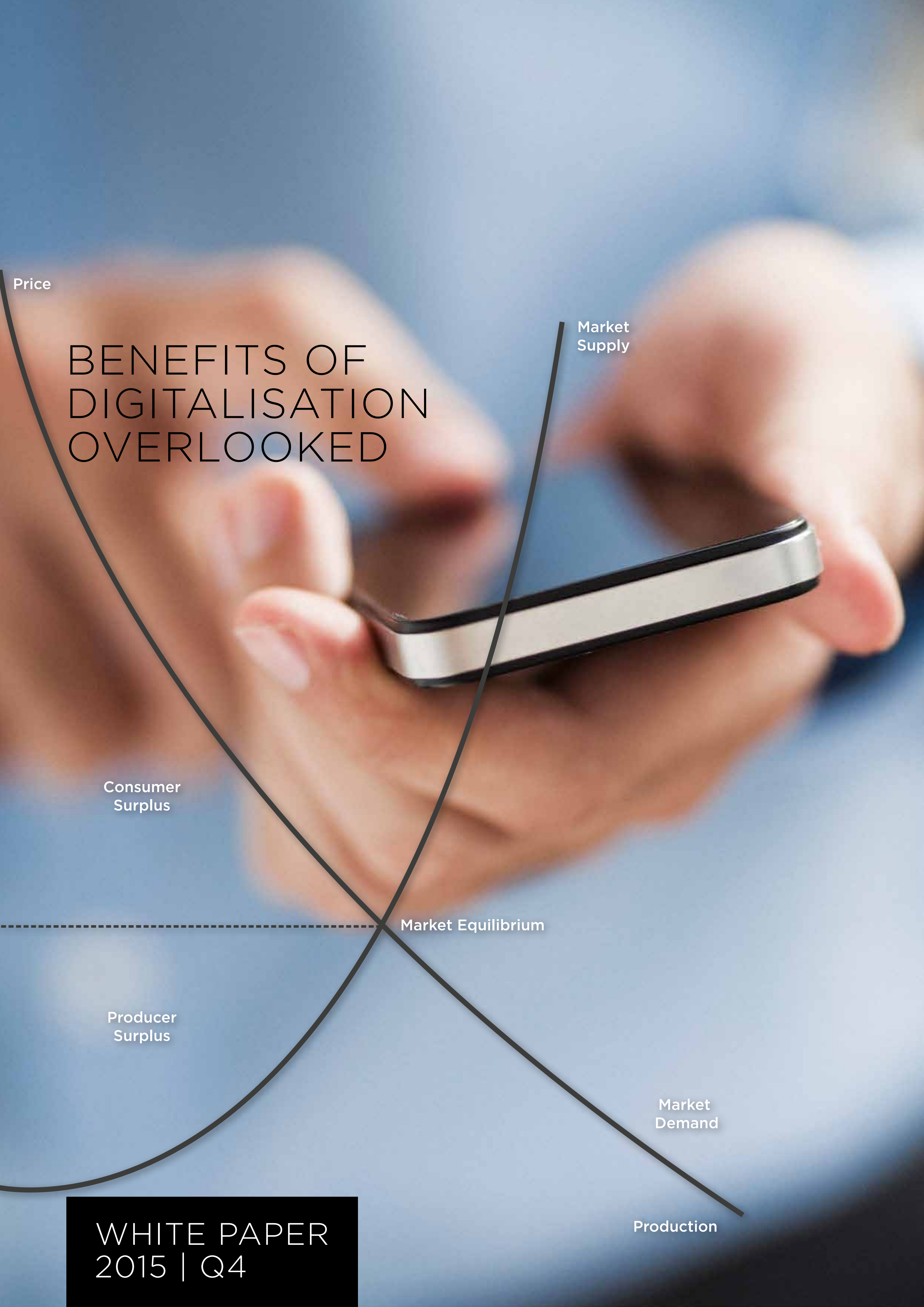
BENEFITS OF DIGITALISATION OVERLOOKED



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Benefits of Digitalisation Overlooked

By Morten Springborg, Theme specialist

Digitalisation, technology acceleration and the sharing economy are changing our world forever. World-leading businesses are forming and growing at a pace the world has never seen before, but the true winners in this process right now are probably consumers, given the growth in real purchasing power. We call it "consumer surplus": an improvement in purchasing power that statistical data are unable to reflect. Although more and more people are aware of the advance of technology, it is underrecognised in the debate on where the global economy is headed.

Since the Great Recession of 2008-09, the US economy has delivered relatively stable but disappointing growth to the tune of about 2.2% per year. This is a rate much lower than seen in previous post-recession periods and also much lower than the increase in employment would suggest. Employment growth has hovered at its normal level of 1.5-2.0% per year since 2009; a rate of growth that in previous periods of recovery would have meant economic growth rates of about 3.5% per year. This time the US recovery has been weaker than previous ones. Apparently, the productivity improvements has been weak because the growth in employment has not led to the expected growth of the economy.

There have been many attempts to explain this disappointing trend over the past six years. One of the arguments has been that central banks have pursued the wrong interest rate policy, keeping interest rates too low for too long, which has only resulted in financial speculation and, unfortunately, has encouraged companies to buy back their own shares instead of making real investments in their production facilities, something that would have improved productivity.

Another explanation is that we are experiencing smaller technological advances today than we used to do. Professor Robert Gordon has been a prominent advocate of this view. He believes "the third industrial revolution", which is based on information technology and telecommunications, is not as productivity-enhancing as the previous industrial revolutions, which were based on the steam engine, railroads, electricity, cars and airplanes. We don't concur with this view, as you will see if you read our article entitled "Second half of the chessboard: Moore's law", but more about that below.

It has also been suggested that the disappointing rate of economic growth is due to a shortage of demand in society, the so-called Keynesian stagnation. This is the view supported by the world's central banks. Through aggressive monetary policies, they have tried to move consumption from the future to today through very loose monetary policies. For more on this, see our insight article entitled "Currency wars". Allegedly, the reasons for the weak demand lies in a much too large debt service commitment, governments' much too tight fiscal policies (!) and declining real wages for ordinary wage earners.

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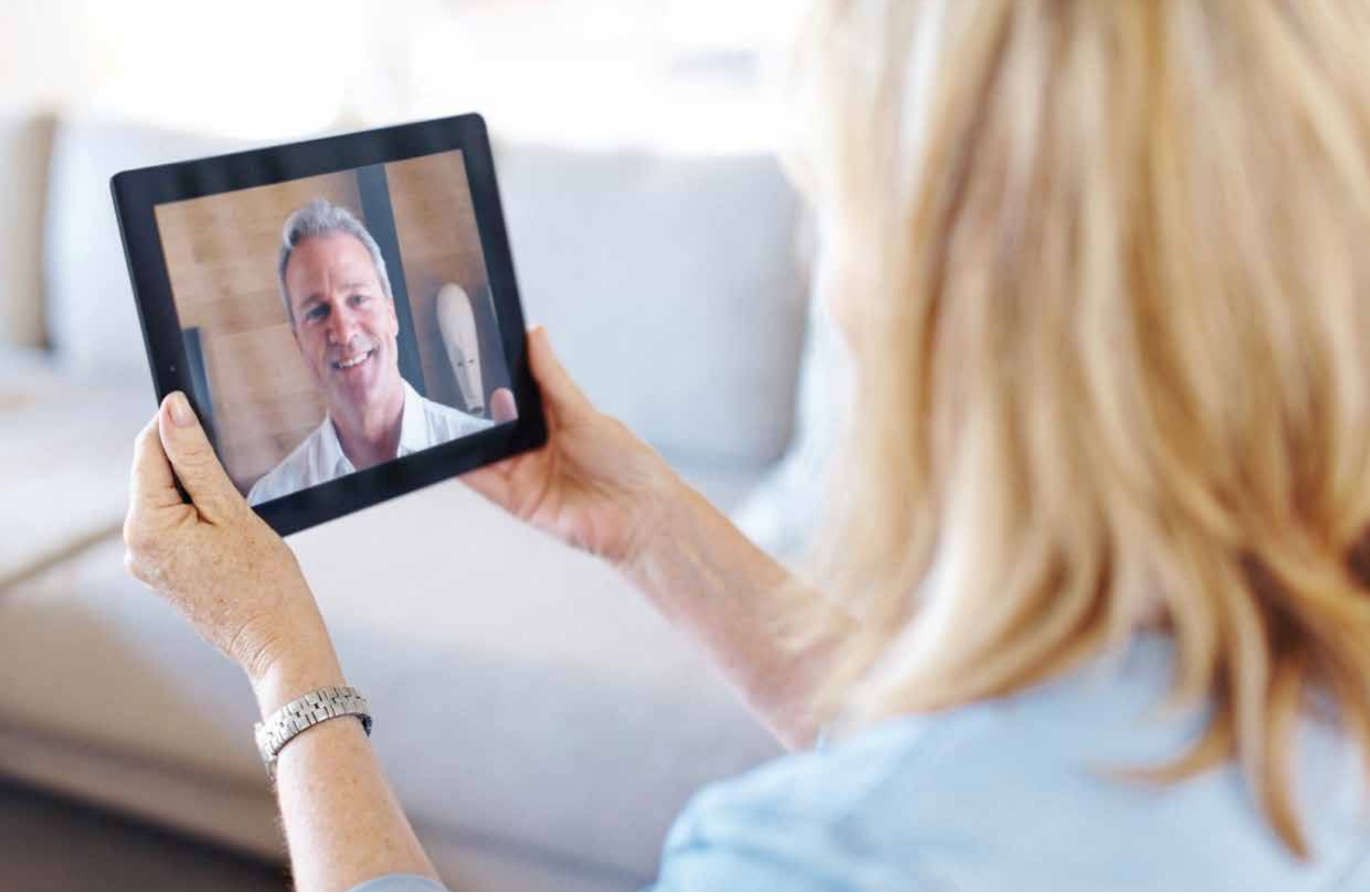
A number of factors suggest that wage earners have been under pressure in recent years, edged out partly by competition from emerging market economies and partly by companies' growing use of technology. In our view, however, there are other and perhaps more important explanations for the apparently disappointing growth and productivity performance in the Western world. Only rarely are technology acceleration and digitalisation of society mentioned as the reason.

Digitalisation, sharing economy and consumer surplus

In 1987, Robert Solow, the Nobel prize winner that year in economics, said, 'We can see computers everywhere except in the productivity statistics.' What he meant was that information technology as a driver of productivity was overrated, as productivity growth was also disappointing back then. Subsequently, productivity did in fact pick up during the 1990s, and given what we know today about transformative technological change which, it would seem, only accelerates year after year, the statement might today be seen as a criticism of the way we calculate growth and productivity.



Recently, Sir Charlie Bean, the former deputy governor of the Bank of England, strongly criticised the way Britain's financial statistics are calculated. Britain's – and in fact all of the Western world's statistics were developed in the years following the depression in the 1930s, and have not evolved to any great extent since, despite the fact that our world of today has changed completely. We live in a time when more and more products are constantly becoming better and cheaper. This is a process mainly driven by digitalisation.

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The cost of digital products and services tends to move towards zero, which means that their prices also drop rapidly.

One example of this is software. Citibank recently examined this trend, referring to academic studies showing that just the statistical deficiencies in accounts of quality improvements of software can explain 0.2% of the missing growth and productivity in the United States. Add to this an inadequate measurement of quality improvements within a large number of other areas, such as education (massive open online courses) and transportation (Uber and UPS) among others.

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The list of industries experiencing or being exposed to rapid technological change is a long one. For many years, the telecoms industry has faced the challenge of plunging prices, and Google and Facebook have forever changed the advertising business. Uber is revolutionising the taxi industry, and AirBnB is growing ever larger at the expense of the hotel industry, which is at risk of ending up like a deer freezing in the middle of the road in the headlights of an oncoming car.

New services changing the rules of the game

The way we communicate with each other is a good example of the distorted picture we may have of our financial world. Take

Skype, for example, which according to McKinsey & Company, helped global consumers save USD 150 billion in 2005-13 (USD 38 billion in 2013 alone), because users of Skype (who more or less call for free) account for some 40% of international telephone calls. This is revenue the world's telecoms operators have lost and which, conversely, has been saved by the world's consumers.

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These savings to the consumer have been given the term consumer surplus. Skype is far from the only example of how the digitalisation of products and services has fundamentally changed our world and how it adds to the consumer surplus. The emergence of e-mail has changed our written communication to such an extent that the world's postal services are in a life or death struggle.

The fact is that we communicate so much more with each other today – at the speed of light – and the cost of doing it has collapsed.

In our financial statistics, this loss of revenue for the postal services will be recognised as a loss of GDP and productivity. However, the fact is that we communicate so much more with each other today – at the speed of light – and the cost of doing it has collapsed. It's a drag, if you're a mail man, but for the consumer and for the world in general, this means a huge lift in productivity and an increase of consumer surplus. It produces savings that can be used in other consumer areas.

Our national accounting systems have severe and growing deficiencies. As digitalisation expands its reach, our perception of the financial situation becomes more and more muddled because our statistics detect less and less of the value creation in society. However, the big winners are actually consumers – and society in general.

As the sharing economy grows, we will all be able to utilise our houses, our cars and our labour more efficiently. This will pose a problem for companies and economies that do not embrace change.

The technological progress and digitalisation of goods and services means a much better utilisation of existing assets at ever lower costs. As the sharing economy grows, we will all be able to utilise our houses, our cars and our labour more efficiently. This will pose a problem for companies and economies that do not embrace change, whereas the winners in the digital economy will be consumers and most likely a small number of companies that have the capability to exploit the network effects to their own advantage as well as that of consumers.

Scaling businesses

As equity investors, we monitor these changes very closely. More and more businesses face the threat of marginalisation because their products are being digitalised and, obviously, you should avoid investing in such companies. On the other hand, capacity limitations in a digitalised world are becoming less and less relevant. The marginal cost of selling an extra unit is close to zero, and digitalisation basically means the market is being expanded to cover the whole world.

The consumer surplus gives consumers more purchasing power, and companies selling consumer goods that are not being digitalised are in a favourable position.

Digital products offer huge benefits of scale, giving the market leader huge cost benefits compared with the rest of the market. Add to this the so-called "network effects" that can create demand effects that further boost the dominant producer of a digital product. Facebook is a good example of this phenomenon: more and more people are attracted to Facebook because it is already the largest social network. You have a greater probability of finding your friends on Facebook than on any other network. Those network effects also support companies like Uber, Skype, Amazon, Rakuten and Alibaba, giving them a huge competitive edge.

On the other hand, the consumer surplus gives consumers more purchasing power, and companies selling consumer goods that are not being digitalised are in a favourable position. Such consumer goods could be food, clothing, restaurants or pharmaceutical products.

> **We strongly believe that we are approaching a world where statistics are becoming more and more misleading. Economic trends and, by extension, the lack of value creation in society may not be as bleak a prospect as many newspaper headlines would have us believe.**

Nobel Prize winner Danny Khaneman once said that people – and economists in particular, tend to ignore things that cannot be measured. We believe that consumer surplus is one of those things, and economists who ignore the structural changes in society will tend to have a much too negative perception of the economy. On the other hand, statistics are considered to have great validity, and politics and capital markets are based on the assumption that statistics can be trusted. But, as Benjamin Disraeli is quoted as saying, there are three types of lies: ”lies, damn lies and statistics”. We strongly believe that we are approaching a world where statistics are becoming more and more misleading. Economic trends and, by extension, the lack of value creation in society may not be as bleak a prospect as many newspaper headlines would have us believe.

CARNEGIE ASSET MANAGEMENT FONDSMÆGLERSELSKAB A/S
Dampfærgevej 26 · DK-2100 Copenhagen
Tel: +45 35 46 35 00 · Fax: +45 35 46 36 00
www.carnegieam.com