



Northern Ireland  
Assembly

## Research and Information Service Briefing Paper

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15 January 2015

NIAR 20-15

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# FDI determinants in European regions

## 1 Introduction

The following paper explores Foreign Direct Investment in a number of European regions, specifically

- Nordrhein-Westfalen;
- Scotland;
- Greater Stockholm;
- The Amsterdam Region;
- Copenhagen Capital Region; and
- Greater Zurich Area.

These regions have been selected due to their performance and placing in the FDI Intelligence European Cities and Regions of the Future Report 2014/2015. All regions appear in the report's top ten European regions and perform well in their specific categories: large; mid-sized; and small region. Two regions from each category are examined.

The paper provides an overview of the FDI proposition in each region, examining factors such as business climate, taxation, investment promotion, key sectors, connectivity and research intensity.

The report concludes by highlighting key points of commonality between the regions examined.

## 2 Large regions

### 2.1 Nordrhein-Westfalen

#### **Brief**

**Country:** Germany

**Political Status:** Federal State

**Population:** 17.5 million (source: NRW Invest)

**GDP:** €599.8bn (2012, source: NRW Invest)

**Key industries:** Chemical, Mechanical, Biotechnology.

#### 2.1a Why Nordrhein-Westfalen?

The Nordrhein-Westfalen (NRW) region was placed 1<sup>st</sup> overall in FDI Intelligence's European Cities and Regions of the Future Report 2014/2015. It also placed 1<sup>st</sup> in the category of large European regions. This study took into consideration numerous different economic criteria namely, infrastructure, cost effectiveness, human capital and lifestyle, business friendliness, economic potential and FDI strategy. The NRW region placed 5<sup>th</sup> in Infrastructure, 2<sup>nd</sup> in Human Capital/Lifestyle, 2<sup>nd</sup> in Economic Potential, 3<sup>rd</sup> in Business Friendliness and 2<sup>nd</sup> in FDI strategy.<sup>1</sup>

#### 2.1b Nordrhein-Westfalen's FDI Proposition

Key elements of the NRW FDI proposition include the region's logistics and infrastructure, business support network (including incentives and its promotion agency), its research intensity, international outlook and already existing industries.

**Logistics and infrastructure:** The location of NRW in North-West Germany, bordering the Netherlands and Belgium puts out at the heart of the European Market. These

<sup>1</sup> FDI Intelligence, European Cities and Regions of the Future (2014) (accessed 18 December 2014)  
<http://www.fdiintelligence.com/Locations/Europe/European-Cities-and-Regions-of-the-Future-2014-15> .

logistical advantages are aided by the fact that it has well developed transport infrastructure, including two major international airports, Dusseldorf and Cologne and a further four with European connections. Furthermore, it has a well-developed road and rail network with 6,000 km of railways, 720 km and 2,200 km of high-speed road networks. The state location on the Rhine is of significance as it links NRW to major seaport of Rotterdam. Each year 124 million tons of goods are handled at a total of 120 public or private ports, this includes the Port of Duisburg, the world's largest inland port.

**Corporation Tax:** Federal corporate tax in Germany is 15%, however a further trade tax is administered at regional level which is typically another 15%.<sup>2</sup> The investment promotion agency for NRW state that the overall tax burden for a joint-stock company (corporation) is 29.8%.<sup>3</sup>

**Incentives:** NRW benefits from incentives offered by the German Federal government. Germany offers numerous incentives to all investors, regardless of whether they are from Germany or not. There are a number of incentives programs available which can be grouped into two overall packages: the investment incentives package which includes different measures and programs to reimburse investment costs; and the operational incentives package containing programs to subsidise costs once the location-based investment has been realised.

Importantly foreign investors are subject to exactly the same conditions available to German investors. Eligibility for such schemes is determined by company size, industry category and type of investment. In most cases incentives are more likely to be granted to SMEs, and in some cases, particularly in relation to R&D, SMEs are specifically targeted.

The German Federal Government incentivises high tech R&D through €5 billion worth of grants, awarding of such grants generally requires collaboration between enterprise and research institutions. Furthermore, public loans are available for foreign investors, with below market value interest rates and generous periods of grace. These are available on the same terms to foreign and German investors.

The investment incentives package consists of:

- Cash incentive programs;
- Public loan programs; and
- Public guarantee programs.

The operational incentives package consists of:

- Labour-related programs;
- Incentive programs; and

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<sup>2</sup> NRW Anglo Info, Trade Tax (accessed 16 December 2014) <http://nrw.angloinfo.com/information/money/business-taxes/trade-tax/>.

<sup>3</sup> NRW Invest, 10 Good Reasons for your Investment Decision (accessed 16 December 2014) [http://www.nrwinvest.com/NRW\\_at\\_a\\_glance/Good\\_reasons\\_for\\_NRW/index.php](http://www.nrwinvest.com/NRW_at_a_glance/Good_reasons_for_NRW/index.php)

- R&D incentive programs.

On top of these federal incentives for innovation, there are also incentives at the regional level with the Regional Economic Development Program NRW. The aim of the program is to secure jobs and investment in structurally weak regions within the state. The awarded grant can be up to 25% of the amount invested, there are extra incentives linked to the securing of jobs. The grants are available for both foreign and domestic firms, provided they meet the characteristics of being an SME.<sup>4</sup>

**Research Intensive:** NRW has 41 technology centres and more than 40 non-university research facilities form the densest research network in Europe and provide ideal conditions for technology transfer.

It also has 72 universities and technical colleges with more than 686,600 students. Six of the ten largest universities in Germany are located here. Approximately, 76,600 foreign students study at institutes of higher education in North Rhine-Westphalia.

**Internationalism:** NRW accounts for 27.5% of all foreign investments into Germany, making it the number one investment location. Approximately 15,000 foreign firms operate in NRW, including Ford, Toyota and Vodafone. Foreign firms employ over 760,000 in the state.<sup>5</sup>

Eichener points out that historically NRW benefited from creating a Japanese cultural cluster around Dusseldorf, the state capital, including Japanese schools, restaurants and cultural events and a Japanese Chamber of Commerce. These lifestyle factors make Dusseldorf an attractive proposition for Japanese investors. With 420 Japanese companies based there, of a total of 500 in the NRW, at the time of writing. This is aided further by NRW invest having an Economic Development Agency in Tokyo. This identifies the importance of cultural factors in decision making.<sup>6</sup>

According to NRW Investment guide there are 19 foreign and six international schools in the state today, this contributes to the feel of region being a global centre.<sup>7</sup>

**Investment Promotion Agency:** NRW benefits from an active state owned investment promotion agency, which has existed since 1960. This facilitates foreign investments, by offering suitable commercial and industrial sites, advising investors on issues, such as tax and legal and offering assistance with spin offs and start-ups. It also promotes the state globally, with branches in China, India, Korea, Russia, Turkey and the United States.<sup>8</sup>

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<sup>4</sup> NRW Invest, NRW Investment Guide (accessed 08 January 2015)

[http://www.nrwinvest.com/Publications/Investment\\_Guide\\_to\\_North\\_Rhine-Westphalia\\_.pdf](http://www.nrwinvest.com/Publications/Investment_Guide_to_North_Rhine-Westphalia_.pdf)

<sup>5</sup> *Ibid*

<sup>6</sup> Eichener, V. (2002) Regional Industrial Policy and Foreign Direct Investment in Nordrhein-Westfalen

<http://klibredb.lib.kanagawa-u.ac.jp/dspace/bitstream/10487/3191/1/kana-5-17-0005.pdf>

<sup>7</sup> NRW Invest, NRW Investment Guide (accessed 08 January 2015)

[http://www.nrwinvest.com/Publications/Investment\\_Guide\\_to\\_North\\_Rhine-Westphalia\\_.pdf](http://www.nrwinvest.com/Publications/Investment_Guide_to_North_Rhine-Westphalia_.pdf)

<sup>8</sup> NRW Invest, About Us (accessed 18 December 2014) [http://www.nrwinvest.com/About\\_us/index.php](http://www.nrwinvest.com/About_us/index.php)

As outlined below the state government puts considerable time and resource into cluster management in its key industries, facilitating collaborative relationships and promoting the successes such as in automotive, biotech, chemicals, mechanical engineering and nanotechnology.

Eichener notes the evolution in tactics of NRW in trying to attract foreign investment. Initially incentives were delivered from state level and applied broadly, meaning that often firms received financial incentive, when they did not warrant or require them. However this then evolved to incentives being distributed in the smaller regions, closer to the coalface of economic activity. Consensus between previously competing stakeholders such as chambers of commerce and trade unions was also incentivised, and paved the way for the creation of technology centres, which created mutual economic benefit for stakeholders.<sup>9</sup>

Key Industries in the NRW region include:

- **Chemicals:** NRW has successfully built a cluster around chemical industries. NRW is the number one location for chemical industry in Germany and 4<sup>th</sup> worldwide. The chemical industry employs 120,000 in 400 companies in the state and makes €65 billion of sales. NRW's credentials for chemical industry have been promoted through the use of the Chemsite Initiative which aims *'to intensify company networking as well as cooperation with research and technology facilities along the value chain. This should serve to improve the competitiveness of companies along with the region and its innovativeness'*. It serves as a public-private partnership which markets the Ruhr (a region within NRW) as a chemical region, providing access to training and qualifications for employees, forms innovative networks between companies, enterprise and science.<sup>10</sup>
- **Biotech:** Similarly the biotech sector is also strong, with 3,400 employed, more than any other German state. 42% of German biotech sales originate in NRW and it also achieved the most venture capital of any other German state €80 million. The strength of NRW in biotech is illustrated by the fact that it occupies 9th place worldwide and 1st place in Europe in terms of biotech patent applications. Core biotech companies such as international actors like QIAGEN, as well as other growing dynamic companies, help distinguish NRW as an investment location.<sup>11</sup>

Again the state government engages in cluster promotion and management, through the use of the state agency BIO.NRW. One of the central tasks of BIO.NRW is to initiate and promote scientific and academic contacts and corporate efforts within North Rhine-Westphalia. Another goal is to connect local key actors in biotechnology with regional and national networks, committees and international

<sup>9</sup> Eichener, V. (2002) Regional Industrial Policy and Foreign Direct Investment in Nordrhein-Westfalen  
<http://klibredb.lib.kanagawa-u.ac.jp/dspace/bitstream/10487/3191/1/kana-5-17-0005.pdf>

<sup>10</sup> ChemSite, NRW-Location for the Chemical Industry (accessed 06 January 2015) <http://www.chemsite.de/chemsite-en/region/chemieland-nrw.php>

<sup>11</sup> NRW Invest, RW Investment Guide (accessed 13 January 2015)  
[http://www.nrwinvest.com/Publications/Investment\\_Guide\\_to\\_North\\_Rhine-Westphalia\\_.pdf](http://www.nrwinvest.com/Publications/Investment_Guide_to_North_Rhine-Westphalia_.pdf)

partners. The biotechnology cluster catalyzes networking by means of its membership in close cooperation with regional, national and international networks, committees and associations.<sup>12</sup>

- **Mechanical Engineering:** The biggest industrial employer in NRW is mechanical engineering with more than 197,000 employees (21.1% share of German total)<sup>13</sup>. There are 1,487 companies located in NRW and mechanical engineering sector, and are responsible for €48 billion of sales.<sup>14</sup> A dense network of universities with institutes geared to production enables the industry to be strengthened by necessary scientific support.<sup>15</sup>

Making NRW a stronger and more competent location for science and research is one of the main political priorities of state government. Therefore, NRW implements a comprehensive offensive for knowledge and technology transfer in order to efficiently link its science and industry sectors.<sup>16</sup>

## 2.2 Scotland

### Brief

**Country:** United Kingdom

**Political Status:** Devolved Regional Parliament

**Population:** 5.3 million (source: ONS)

**GDP:** £130bn onshore activity, £148bn with offshore activity included (2012, source: Scottish Government)

**Key industries:** Oil and Gas, Creative Industries

### 2.2a Why Scotland?

Scotland was placed 2<sup>nd</sup> overall in fDi Intelligence's "European Cities and Regions of the Future" 2014/2015. Scotland also finished 2<sup>nd</sup> in the "large regions" category. This study took into consideration numerous different economic criteria namely, infrastructure, cost effectiveness, human capital and lifestyle, business friendliness,

<sup>12</sup> BIONRW, Bio.NRW-About us (accessed 06 January 2015) [http://www.bio.nrw.de/en/about\\_us..](http://www.bio.nrw.de/en/about_us..)

<sup>13</sup> EU Regional Innovation Monitor, NRW Socio-economic Profile (accessed 07 January 2015) <http://ec.europa.eu/enterprise/policies/innovation/policy/regional-innovation/monitor/base-profile/northrhine-westphalia>

<sup>14</sup> Invest NRW, Mechanical Engineering in NRW (accessed 14 January 2015) [http://www.nrwinvest.com/Important\\_Industries/Mechanical\\_Engineering/index.php](http://www.nrwinvest.com/Important_Industries/Mechanical_Engineering/index.php).

<sup>15</sup> NRW Invest, NRW Investment Guide (accessed 13 January 2015) [http://www.nrwinvest.com/Publications/Investment\\_Guide\\_to\\_North\\_Rhine-Westphalia\\_.pdf](http://www.nrwinvest.com/Publications/Investment_Guide_to_North_Rhine-Westphalia_.pdf)

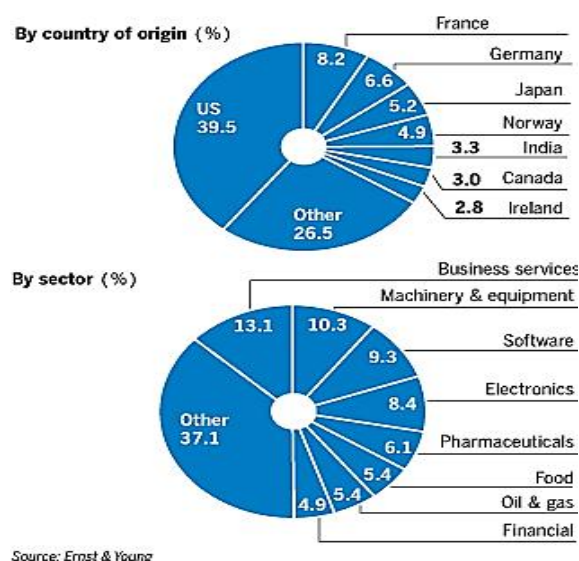
<sup>16</sup> EU Regional Innovation Monitor Plus, NRW Policy Trends Profile (accessed 15 January 2015) <http://ec.europa.eu/enterprise/policies/innovation/policy/regional-innovation/monitor/base-profile/northrhine-westphalia>

economic potential and FDI strategy. Scotland placed 9<sup>th</sup> in the economic potential category, 5<sup>th</sup> in human capital and lifestyle, 4<sup>th</sup> in terms of business friendliness and 1<sup>st</sup> in FDI strategy.<sup>17</sup> This makes it a case study worthy of evaluation for lessons learned for Northern Ireland.

According to an “attractiveness survey” by global professional services firm EY, Scotland is the second most popular regional destination for FDI in the UK, behind London. In 2013 Scotland attracted 82 global FDI projects, an 8% increase on the previous year. This has been particularly helped by software projects from the US. Glasgow and Edinburgh account for 38% of projects into Scotland from 2004-2013. Scotland performed much more favourably in terms of R&D projects than the overall UK figure.<sup>18</sup>

Financial Times state that ‘Scotland has courted foreign direct investment (FDI) assiduously and successfully since 1945. As a result, foreign multinationals account for about 30 per cent of the employment and half the turnover generated by Scotland’s large companies, according to data in the paper. They are also responsible for about 65 per cent of all research and development spending’.

**Figure 1: Scotland’s FDI Projects (2004-13)<sup>19</sup>**



## 2.2a Scotland’s FDI proposition

**Investment Promotion Agency:** Scotland’s success at attracting FDI can be attributed in part to the work of the investment promotion agency, Scottish Development International. The Economist magazine notes the effectiveness of its

<sup>17</sup> FDI Intelligence, European Cities and Regions of the Future (accessed 18 December 2014)

<http://www.fdiintelligence.com/Locations/Europe/European-Cities-and-Regions-of-the-Future-2014-15>

<sup>18</sup> EY, 2014 Scotland Attractiveness survey (accessed 06 January 2015) <http://www.ey.com/UK/en/Issues/Business-environment/2014-Scotland-attractiveness-survey>

<sup>19</sup> Ibid



operations. Its success is not necessarily to do with subsidies as these are capped at uniform levels throughout Great Britain by EU state-aid rules, but rather with investment into such things as 27 overseas offices which scout for business.

*Scotland is simply better at co-ordinating different arms of local and central government to deliver what inward investors want—roads for new factories, planning permissions, training packages for workforces and the like. A Scottish government minister cracks the whip at any laggards.*<sup>20</sup>

Scottish Development International devote a lot of time to looking after investors once they are up and running, offering help with local recruitment or supply chain problems. The agency's senior executives occasionally visit overseas headquarters to check chief executives are happy. Chief Executive of Scottish Development International, Anne MacColl says almost half of the 76 projects brought in 2012 came from existing investors in Scotland.<sup>21</sup> This demonstrates the contribution that an active investment promotion agency can make

**Higher Education:** According to the ONS Scotland has the third highest concentration of graduates of any region in the UK (41%), behind only Inner London (60%) and Outer London (45%)<sup>22</sup>. The concentration of high level universities in Scotland is a major contributor to its success at attracting FDI.

According to the European Commission's Regional Innovation Monitor:

*Scotland's strong academic base is evidenced by the size and international standing of Scottish higher education institutions, with three (Edinburgh, Glasgow and St Andrews) among the world's top 150 universities. Directly employing some 38,455 full-time equivalent staff and teaching some 231,000 students, Scottish universities had a total turnover of £2.84bn (€3.37bn) in 2011/12. Scotland has the highest ratio of cited research papers to GDP in the world and the impact of Scottish research is ranked second in the world. Scottish universities attract around 40,000 international students in each course. In 2011-12 there were 281,630 students in higher education in Scotland, and the number of new entrants was 132,365, which represents one of the largest student bodies in the OECD economies.*<sup>23</sup>

**Resource Based FDI:** Scotland previously had experienced the footloose nature of multinational activity, over the collapse of the so called "Silicon Glen" of electronics

<sup>20</sup> The Economist, Catching the Scots-Why England trails the Celtic fringe (2013) (accessed 07 January 2015)  
<http://www.economist.com/news/britain/21584358-why-england-trails-celtic-fringe-catching-scots>

<sup>21</sup> *Ibid*

<sup>22</sup> ONS, Full Report-Graduates in the UK Labour Market (2013) (accessed 07 January 2015)  
[http://www.ons.gov.uk/ons/dcp171776\\_337841.pdf](http://www.ons.gov.uk/ons/dcp171776_337841.pdf)

<sup>23</sup> EU Regional Innovation Monitor, Research Development and Innovation (accessed 07 January 2105)  
<http://ec.europa.eu/enterprise/policies/innovation/policy/regional-innovation/monitor/base-profile/scotland>



production, when multinationals that had initially set up in towns in Scotland's Central Belt moved facilities to other lower cost locations, such as the Far East.<sup>24</sup>

In recent years there has been a shift towards "natural resource-seeking" investment, which taps the country's natural and geographic advantages. Activity based around these resources is less likely to be subject to footloose multinational activity, provided that the resources are plentiful. As an economist from Glasgow University notes '*you can't make Scotch whisky anywhere else; you can't dig oil out of the North Sea anywhere except Norway or Scotland*'.<sup>25</sup> On the basis of these points Scotland's position as a successful FDI region is perhaps more sustainable than it was previously, although much depends on the extent of the longevity of Scotland's oil and gas resources.

Currently the oil and gas industry employs more than 220,000 people in Scotland, accounts for 13.2% of Scottish GDP, with foreign firms such as Exxon Mobil, Chevron, Apache and Dana Petroleum heavily involved in oil and gas production in Scotland. The average salary within the oil and gas sector stands at £73,000, almost £50,000 more than the average Scottish salary. The spending power that this provides employees boosts the wider Scottish economy.<sup>26</sup>

**Key Industry – Creative Industries:** On top of this resource based industry Scotland also performs well in Creative Industries. In 2011 the GVA of the Creative Industries sector was £2.8 billion, larger than life sciences. The industry employed 65,200 people in 2012 2.69% of all people employed in Scotland.<sup>27</sup>

The public body Creative Scotland has a role supporting the industry in distributing funds and facilitating new projects, from both domestic and foreign investors. It allocated £4 million in 2013/14 to for the purposes of '*development, production and exploitation of feature films, feature documentaries and network television series, attendance at key markets and festivals and a number of film and television talent development initiatives*'.<sup>28</sup>

**Film and TV:** Scottish Development International is active in the promotion of Scotland as a setting for film and TV. Notable high grossing Hollywood movies have recently been shot in Scotland, Cloud Atlas and World War Z were both shot in Glasgow, while Prometheus was shot in the Isle of Skye.

<sup>24</sup> The Scotsman, Silicon Glen: The Miracle That Just Melted Away (2007) (accessed 13 January 2015)

<http://www.scotsman.com/news/scotland/top-stories/silicon-glen-the-miracle-that-just-melted-away-1-698782>

<sup>25</sup> Financial Times. Foreign Investors Key to helping Scotland sink or swim (2014) (accessed 06 January 2015) Available at <http://www.ft.com/cms/s/2/80a37b6c-18be-11e4-933e-00144feabdc0.html#axzz3O3MnudsN>

<sup>26</sup> Liddell, G. SPICe (2014) Financial Scrutiny Unit Briefing- Scottish North Sea Oil and Gas Industry (accessed 13 January 2015) [http://www.scottish.parliament.uk/ResearchBriefingsAndFactsheets/S4/SB\\_14-28.pdf](http://www.scottish.parliament.uk/ResearchBriefingsAndFactsheets/S4/SB_14-28.pdf)

<sup>27</sup> Creative Scotland, Creative Industries-Data (accessed 07 January 2015) [http://www.creativescotland.com/\\_data/assets/pdf\\_file/0018/26811/Creative-Industries.pdf](http://www.creativescotland.com/_data/assets/pdf_file/0018/26811/Creative-Industries.pdf)

<sup>28</sup> Creative Scotland, Funding (access 08 January 2015) <http://www.creativescotland.com/funding>

Scotland utilises its potential in film and TV with low production costs coupled with very different geographical settings with lochs, glens and major cities all within a relatively close proximity.<sup>29</sup>

**Gaming:** In the area of gaming an effective cluster has developed around Dundee, this is a result in links between universities and the industry in creating a high concentration of gaming engineers.<sup>30</sup> Abertay University offer a number of computer game related courses and the University now enjoys a symbiotic relationship with the gaming industry. This has contributed to Dundee becoming a '*notable cluster for the world video games industry*'.<sup>31</sup>

**Incentives for Creative Industries:** Scottish Development International actively promotes the tax relief available for creative industries. This is a result of UK wide incentives offered by HMRC offering tax relief for different projects including film, animation, high-end television and video games. Corporation tax relief is in relation to corporation tax which could allow for a larger tax deduction, or in some circumstances a payable tax credit if a loss is made. The production must meet certain stipulations particularly regarding how much of production takes place in the United Kingdom. In the case of films, the film must also pass a "culture test" by the British Film Institute.<sup>32</sup> It is evident that Scottish Development International has utilised the opportunity of such UK tax incentives and promotes them effectively.

**Other Incentives:** Tax Incentives are also available in other areas. To encourage innovation and entrepreneurship in Scotland, commercialisation of a UK or EU patent in Scotland will result in paying a lower rate of Corporation Tax of 10% until 2017. Furthermore Scottish Development International also provides grants to support salary or capital costs in selective cases.

Scotland also avails of UK tax credits which incentivise Research and Development, these allow for companies to deduct 225% of qualifying expenditure on R and D activities when calculating profit for tax purposes.<sup>33</sup> Such UK incentives strengthen Scotland's position to attract international entrepreneurs' intent on innovation and job creation.

<sup>29</sup> Scottish Development International, Film and Television (accessed 08 January 2015) <http://www.sdi.co.uk/invest/sectors/creative-industries/film-and-tv>

<sup>30</sup> Scottish Development International, Games (accessed 08 January 2015) <http://www.sdi.co.uk/invest/sectors/creative-industries/games>

<sup>31</sup> BBC News, How Dundee Became a Computer Games Centre (2014) (accessed 13 January 2015) <http://www.bbc.co.uk/news/business-29122873>

<sup>32</sup> HMRC, Corporation Tax: Creative Industry Tax Reliefs (accessed 08 January 2015) <https://www.gov.uk/corporation-tax-creative-industry-tax-reliefs>

<sup>33</sup> Business Scotland, R&D Tax Credits and Allowances (accessed 08 January 2015) <http://business.scotland.gov.uk/view/funding/rd-tax-credits-and-allowances#funding-overview>

### 3 Mid-sized regions

#### 3.1 Greater Stockholm

##### **Brief**

**Country:** Sweden

**Political Status:** Voluntary Local Government Association

**Population:** 3.5 million (source: Invest Stockholm)

**GDP:** €135bn (source: Invest Stockholm)

**Key industries:** Oil and Gas, Creative Industries

##### 3.1a Why Greater Stockholm?

The Greater Stockholm region was placed 1<sup>st</sup> in FDI Intelligence's "European Cities and Regions of the Future" Report 2014/2015 in the category of Mid European Regions. The Greater Stockholm region also placed 3<sup>rd</sup> overall in the league table of "European Regions of the Future". This study took into consideration numerous different economic criteria namely, infrastructure, cost effectiveness, human capital and lifestyle, business friendliness, economic potential and FDI strategy. In the category of mid-sized region Greater Stockholm placed 1<sup>st</sup> in economic potential, 1<sup>st</sup> in human capital/lifestyle, 10<sup>th</sup> in terms of infrastructure, 3<sup>rd</sup> in terms of business friendliness and 2<sup>nd</sup> in terms of FDI strategy.<sup>34</sup> This demonstrates its strength in a number of areas and makes it a worthy case for assessment for potential for lessons learned in Northern Ireland.

At national level Sweden has also performed well in the World Economic Forum's Global Competitiveness Survey, finishing 10<sup>th</sup> overall, 3<sup>rd</sup> in technological readiness, 7<sup>th</sup> in innovation, and 8<sup>th</sup> in business sophistication. It is placed in global top 20 on a number of other areas key for investors such as higher education and training, public institutions and macroeconomic environment.<sup>35</sup>

<sup>34</sup> FDI Intelligence, European Cities and Regions of the Future (2014) (accessed 08 January 2015)

<http://www.fdiintelligence.com/Locations/Europe/European-Cities-and-Regions-of-the-Future-2014-15>

<sup>35</sup> World Economic Forum, Global Competitiveness Survey, Sweden- Economic Profile (accessed 08 January 2015)

<http://reports.weforum.org/global-competitiveness-report-2014-2015/economies/#economy=SWE>

### 3.1b Stockholm's FDI Proposition

Key aspects of Stockholm's FDI proposition include taxation, incentives, its investment promotion agency, quality of life, existing industry sectors, and R&D and innovation performance.

**Corporation Tax:** Sweden offers an attractive offering in terms of corporation tax at 22%, which is below the European average.<sup>36</sup>

According to the US State Department investment guide:

*The effective rate can be even lower as companies have the option of making deductible annual appropriations to a tax allocation reserve of up to 25 percent of their pre-tax profit for the year. Companies can make pre-tax allocations to un-taxed reserves, which are subject to tax only when utilized. Certain amounts of untaxed reserves may be used to cover losses.*

*Due to tax exemptions on capital gains and dividends, as well as other competitive tax rules, such as low effective corporate tax rates, deductible interest costs for tax purposes, no thin-capitalization rules, no withholding tax on interest, no stamp duty or capital duties on share capital, and an extensive double tax treaty network, Sweden is among Europe's most favourable jurisdictions for holding companies<sup>37</sup>.*

Stockholm is advantaged by Sweden's competitive corporate tax arrangements, and is the number one location for Scandinavian headquarters with half of multinationals operating in Scandinavia locating there, making it Scandinavia's number one choice for regional headquarters.<sup>38</sup>

**Tax Relief for Key Foreign Employees:** Sweden offers special income tax relief to encourage highly skilled people, such as international executives, experts, researchers and others with special skills, to work in Sweden. The tax relief scheme makes it easier for foreign-owned and domestic companies to attract experts and other key people from abroad to work in Sweden. The tax relief is motivated by the fact that foreign experts and others who live in Sweden for short periods cannot gain full advantage from Sweden's social welfare and pension system.

<sup>36</sup> UK Trade and Industry, Guidance on Investing in Sweden (accessed 12 January 2015)

<https://www.gov.uk/government/publications/exporting-to-sweden/exporting-to-sweden--2>

<sup>37</sup> US State Department, Investment Climate Statement (2011) (accessed 12 January 2015)

<http://www.state.gov/e/eb/rls/othr/ics/2011/157364.htm>

<sup>38</sup> Invest Stockholm, Regional Headquarters and Shared Service Centres (accessed 13 January 2015)

<http://www.investstockholm.com/en/Investment-Opportunities/Regional-headquarters--shared-service-centers/>

Between 2001 and 2011 around 3,700 foreign experts were granted tax relief. Those that qualify should be key foreign employees in vital positions. Those that do qualify will only be taxed on 75% of their income for the first three years that they are in Sweden.<sup>39</sup>

**Incentives:** The Swedish government offers certain incentives to set up a business in various targeted depressed areas. Loans are available on favourable terms from the Swedish Agency for Economic and Regional Growth and from regional development funds. A range of regional support programs, including location and employment grants, low rent industrial parks, and economic free zones are also available. Regional development support is concentrated in the lightly populated northern two-thirds of the country. There are also several European funds that offer subsidies for starting enterprises and a range of incentives to research and development programs provided by the Swedish Government.<sup>40</sup>

**Investment Promotion Agency:** Invest Stockholm is the investment promotion agency tasked with attracting businesses to the Stockholm region. It offers business development services including visiting programmes for foreign companies, giving assistance in finding possible agents for cooperation, such as establishing links to research companies and tech sources.<sup>41</sup>

It also offers services for expatriates in Sweden, such as assistance with living arrangements, daycare and also networking with other expatriates.<sup>42</sup>

**Quality of Life:** An article by FDI Intelligence outlines the attractive lifestyle advantages that Stockholm contains:

*When Stockholm was awarded the title of European Green Capital for 2010 by the European Commission, it was not only as a result of the environment that the city has managed to create and maintain for its population.*

*Notably the city government in Stockholm adopt to ensure that people in Stockholm are never more than 350 metres away from a green space.*

*Stockholm is an extremely attractive place. Largely made up of myriad islands on an inlet of the Baltic Sea, the city has an industrial feel to it, though greenery – and indeed some spectacular landscape – is always close to hand. Lifestyle is certainly a part of the Stockholm proposition<sup>43</sup>.*

<sup>39</sup> Invest Stockholm, Tax Relief for Key Foreign Employees (accessed 14 January 2015) <http://www.investstockholm.com/Documents/Invest%20Sweden/Tax%20releif%20for%20key%20foreign%20employees.pdf>

<sup>40</sup> US State Department, Investment Climate Statement (2011) (accessed 12 January 2015) <http://www.state.gov/e/eb/rls/othr/ics/2011/157364.htm>

<sup>41</sup> Invest Stockholm, Business Development Services (accessed 14 January 2015) <http://www.investstockholm.com/en/At-your-service/Business-development-services/>

<sup>42</sup> Invest Stockholm, Expatriate Services (14 January 2015) <http://www.investstockholm.com/en/At-your-service/Expatriate-services/>

<sup>43</sup> Blass, T. (FDI Intelligence) Stockholm: Setting Standards for Scandinavia and Europe (2010) (accessed 12 January 2015) <http://www.fdiintelligence.com/Locations/Europe/Stockholm-setting-standards-for-Scandinavia-and-Europe>

The Greater Stockholm region also benefits from Sweden's impressive public health record, with it ranked 7<sup>th</sup> in the World Economic Forum's global competitiveness survey.<sup>44</sup>

Key industry sectors in the Stockholm area include:

- **Automation:** The Stockholm automation cluster is the world's leading cluster for automation technologies. 500 companies are located there with an annual turnover of 30 billion SEK, equivalent to €3.2 billion, which is 10% of global turnover in the industry. The world's largest robot manufacturer ABB, bases its robotics and process operations in Stockholm's automation cluster, 'Robot Valley'.

Robot Valley is a regionally prioritised development initiative, partly financed and supported by the Swedish Governmental Agency for Innovation Systems programme on regional innovation. Robot Valley is located in the west of the Greater Stockholm region and aims to develop an effective innovation system focusing on and promoting innovation within robotics. Its vision is to be a world leader in the development, manufacture and research in the field of robot-based automation.

Robot Valley has been deemed a success in regional cluster development by the European Commission's Regional Innovation Monitor. One of the key influences of the success has been strong engagement by a core group of determined individuals representing industry, academia and the public.<sup>45</sup>

- **Life Sciences:** Life sciences also represent a valuable part of the Swedish economy. There are about 460 companies located in a cluster between Stockholm and the nearby city of Uppsala. The cluster includes world-leading drugs companies such as AstraZeneca, Q-Med and Pfizer, as well as some of the highest globally ranked research institutes, among them Uppsala University, the Karolinska Institute and the Nobel Institute.

There are more than 30,000 experts engaged in life sciences in the region with 6,000 academic scientists, 23,000 experts in industry and 1,800 in government agencies.<sup>46</sup>

- **IT:** The IT sector from November 2013 to October 2014 in Stockholm has witnessed significant growth in venture capital in tech, the number of deals increased by 124% and there was a 338% growth in dollars invested, compared to the same period a year earlier ( November 2012 to October 2013). Stockholm was ranked second globally, only behind Beijing in terms of deal growth, making it a possible contender for the title of '*next silicon valley*'.<sup>47</sup>

<sup>44</sup> World Economic Forum Global Competitiveness Survey, Economic Profile-Sweden (accessed 14 January 2015) <http://reports.weforum.org/global-competitiveness-report-2014-2015/economies/#economy=SWE>

<sup>45</sup> European Commission Regional Innovation Monitor "Robot Valley- Cluster Development (accessed 12 January 2015) <http://ec.europa.eu/enterprise/policies/innovation/policy/regional-innovation/monitor/support-measure/robot-valley>

<sup>46</sup> Stockholm-Uppsala Life Science, Competence and Workforce (accessed 12 January 2015) <http://suls.se/business-opportunities/why/competence-and-workforce/>

<sup>47</sup> CB Insights, The Next Silicon Valley (2014) (accessed 12 January 2015) <https://www.cbinsights.com/blog/next-silicon-valley-data/>



The IT sector in Stockholm has seen significant growth, between 2000 and 2010 the number of ICT companies in the region went from 14,642 to 19,500. This growth has been aided by Stockholm's world class highly developed IT infrastructure with 100% broadband coverage. Stockholm was one of the world's first cities to launch a 4G network.<sup>48</sup>

There exists collaboration in the IT sector between public and private groups to advance the competitiveness of IT in the region. Multinationals active in the region such as IBM, Microsoft and Intel participate in the collaborative project alongside local government and the business regional development agency.<sup>49</sup>

The success in ICT for Greater Stockholm region can in some sense be attributed to the tech cluster Kista Science City which lies in Stockholm. The cluster is recognised as Europe's leading IT cluster and exhibits close relationship between private enterprise, research and academia. Today, the area hosts more than 1,000 ICT companies that combined employ around 25,000 people.<sup>50</sup> Working alongside industry in Kista is the IT Department of Sweden's Royal Institute of Technology, Stockholm University's computer science programmes are also located at Kista. This enables knowledge transfer between academia and industry.<sup>51</sup>

**Research and Development / Innovation:** In Stockholm, the gross expenditure in R&D as a ratio of GDP is 4.3%, which is higher than both the national average of 3.7% as well as the EU27 average of 1.8%. Moreover, the share of gross expenditure in R&D that represents private rather than public investments is higher in the Stockholm region than the EU27 average (72.1% and 63.6% respectively).

This high level of expenditure in business R&D may be explained by the presence of several research-intensive companies, particularly in the sectors of ICT (Ericsson, IBM Svenska and TeliaSonera) and life sciences (AstraZeneca and Pfizer). The high count of patents can be traced to the strong ICT and life sciences clusters present in the region, coupled with a thriving entrepreneurial culture.<sup>52</sup>

This culture of innovation in Stockholm can also be viewed at national level with Sweden finishing 6<sup>th</sup> in the World Economic Forum's Global competitiveness survey in the categories of '*company R and D spend*' and also in '*capacity for innovation*'.<sup>53</sup>

<sup>48</sup> Stockholm IT Region, World Class IT Infrastructure (available 14 January 2015) <http://stockholmitregion.com/why-stockholm/world-class-it-infrastructure/>

<sup>49</sup> Stockholm IT Region, About-Stockholm IT Region (accessed 12 January 2015) <http://stockholmitregion.com/about-stockholm-it-region/>

<sup>50</sup> Stockholm ICT, One of the World's Leading ICT Clusters (accessed 14 January 2015) <http://stockholmitregion.com/why-stockholm/one-of-the-worlds-leading-ict-clusters/>

<sup>51</sup> Kista Science City, KTH-Kista (2014) (12 January 2015) <https://www.kth.se/en/ict/om/kth-kista-studera-i-en-av-stockholms-mest-dynamiska-stadsdelar-1.330216>

<sup>52</sup> European Commission Regional Innovation Monitor, Stockholm - Regional Innovation Report (2011) (accessed 12 January 2015) Monitor. Available at [http://ec.europa.eu/enterprise/policies/innovation/policy/regional-innovation/monitor/sites/default/files/report/stockholm\\_se11\\_rim\\_regional\\_innovation\\_report.pdf](http://ec.europa.eu/enterprise/policies/innovation/policy/regional-innovation/monitor/sites/default/files/report/stockholm_se11_rim_regional_innovation_report.pdf)

<sup>53</sup> World Economic Forum, Global Competitiveness Survey, Economic Profile-Sweden (accessed 14 January 2015) <http://reports.weforum.org/global-competitiveness-report-2014-2015/economies/#economy=SWE>



## 3.2 Amsterdam region

### Brief

**Country:** Netherlands

**Political Status:** Metropolitan area

**Population:** 2.3 million (Metropolitan Area 2013, source: I Amsterdam)

**GDP:** Metropolitan area 15.35% of national GDP 2010 (source: OECD)

**Key industries:** ICT; logistics; creative industries; life sciences; finance; high-tech materials; horticulture and agri-Food

### 3.2a Why the Amsterdam region?

The Amsterdam region is ranked sixth in the FDI Intelligence European Cities and Regions of the Future. It is defined as a mid-sized region and ranks second of all European regions in this size category overall (it is second to Greater Stockholm). It is placed highly in other areas. Notably it is ranked first in infrastructure, third in economic potential, fourth in human capital and lifestyle, and fifth in business friendliness.

The Amsterdam Region is home to the Netherlands' capital city. It is a metropolitan area with over 2,500 international companies including Google, Telsa, the Industrial and Commercial Bank of China, Yakult, and Tommy Hilfiger.<sup>54</sup> These companies account for 15% of the region's total employment. The area attracts approximately 120 international companies each year and is viewed as base for expansion in the European market.<sup>55</sup>

### 3.2b The Amsterdam region's FDI proposition

The Netherlands is the sixth largest economy in the EU and the 16<sup>th</sup> largest in the world. The country's GDP was in excess of €608bn in 2008, approximately 1.29% of global GDP. It is a founding member of the EU and a member of the World Trade Organisation. Strengths of the Dutch market include its early adoption of new technology and being one of the world's most open economies.<sup>56</sup>

<sup>54</sup> I Amsterdam, Why Amsterdam (accessed 11 January 2015) <http://www.iamsterdam.com/en/business/invest/why-amsterdam>

<sup>55</sup> I Amsterdam, Who's here (accessed 11 January 2015) <http://www.iamsterdam.com/en/business/invest/who-is-here>

<sup>56</sup> UK Trade and Investment Guidance, Exporting to the Netherlands (28 August 2014) <https://www.gov.uk/government/publications/exporting-to-netherlands/exporting-to-netherlands>

The region's FDI proposition is based upon: business climate (including tax incentives); international promotion agency support; existing sectors; its workforce; location; digital connectivity; and quality of life.

**Business climate:** the corporate tax rate in the Netherlands is 25%, although companies are taxed at the rate of 20% on the first €200,000 of taxable profit. An 'innovation box' scheme ensures that profit resulting from R&D that leads to patents is taxed at an effective rate of 5%. The personal tax scheme is advantageous to ex-pat workers. Employees recruited from abroad, with specific expertise not already existing in the country, receive a tax-free reimbursement of 30% of their salary. Furthermore, the country has a wage tax credit on qualifying wages earned in the area of technical innovation.<sup>57</sup>

**Investment Promotion Agency:** The Amsterdam Region's investment promotion agency, the Amsterdam Economic Board, is an umbrella body for government agencies, research institutes and the businesses. They aim to stimulate and support sustainable collaboration, innovation and growth in the region, and strengthen international competitiveness.<sup>58</sup> Amsterdam in Business the official foreign investment agency of the Amsterdam Metropolitan Area provides a range of support to businesses seeking to set up in the region, including:

- Providing market Intelligence data;
- Providing information on the investment climate, including information about the Dutch tax climate, incentives, legal & regulatory framework and labour market;
- Facilitating fact finding visits;
- Providing legal & tax advice;
- Helping companies to access talent;
- Facilitating introductions to business & partner networks;
- Providing relocation support; and
- Providing support for international staff.<sup>59</sup>

**Existing sectors:** the Amsterdam Region is home to a number of industry sectors:

- ICT – Amsterdam is the location of the largest data transport hub in the world (further details below) and has amongst the fastest average broadband speeds globally. The region's digital infrastructure is an attractive prospect to ICT companies, for example approximately one third of the European data centres are located in Amsterdam. The region is home to 250,000 ICT professionals, 55% of whom hold a bachelors or master's degree. The area has four Universities, one of

<sup>57</sup> | Amsterdam, Fiscal Advantages, Tax system for progress and expansion (accessed 11 January 2015)

<http://www.iamsterdam.com/en/business/invest/why-amsterdam/fiscal-advantages>

<sup>58</sup> Amsterdam Economic Board (accessed 14 January 2015) <http://www.amsterdameconomicboard.com/english>

<sup>59</sup> | Amsterdam, Invest in Amsterdam, Our Services (accessed 14 January 2015)  
<http://www.iamsterdam.com/en/business/invest/our-services>

which, the University of Amsterdam is ranked as having the best Communication and Media faculty and the eighth best Computer Science faculty in Europe. The region is also home to a number of ICT incubators and accelerators (including: 'Start-up Bootcamp'; 'Rockstart'; 'Venturelab'; 'New Economy Docks'; and 'The Start-up Network'.<sup>60</sup>

- Logistics - Amsterdam's location, its airport, seaports, and data-port have made it an attractive location for logistics businesses.<sup>61</sup> Europe's third largest air cargo hub and fourth largest sea cargo hub are found within its borders. Furthermore, it hosts the world's largest trading centre for plants and flower, the Flower Auction Aalsmeer. The region is home to over 2,000 logistics companies, employing 180,000 people.<sup>62</sup> The Netherlands topped the DHL Global Connectedness Index in 2014.<sup>63</sup>
- Creative industries – Amsterdam ranks fourth on the 2013 Martin Prosperity Institute's Global Cities Index, which assess the performance of the creative economy in cities across the world<sup>64</sup>. It is particularly active in the areas of arts, (the performing arts, visual arts, theatre, galleries and museums) media and entertainment (publishing, radio, TV, film, video and gaming), and creative business services (advertising, photography, design and fashion).<sup>65</sup> The creative industry represents 20% of the area's economy, employing over 100,000 people in the publishing, advertising, entertainment, TV, gaming and fashion industry with an added value of €3.7bn.<sup>66</sup>
- Life sciences – 20% of all Dutch life sciences economic activity stems from the Amsterdam region. The region has the highest concentration of life sciences research in the Netherlands. It is home to two universities with teaching hospitals. Furthermore, 369 life science companies and organisations are based in the area. The sector employs 20,000 people directly or indirectly. There are a total of 117 life science dedicated companies operating in the Amsterdam Region, of which 50% take part in R&D. There are a total of 4,640 dedicated life science employees in the region, with 28% working in R&D. Particular specialisms include: oncology, neuroscience, immunology, infectious disease, cardiovascular disease, and imaging.<sup>67</sup>

<sup>60</sup> Amsterdam Economic Board, Amsterdam: an unrivalled location for ICT business (accessed 11 January 2015)

<http://www.iamsterdam.com/media/pdf/business-publications/ict-folder.pdf?la=en>

<sup>61</sup> I Amsterdam, Logistics (accessed 11 January 2015) <http://www.iamsterdam.com/en/business/invest/your-industry/logistics>

<sup>62</sup> Amsterdam Airport Area, Amsterdam Metropolitan Area: the heart of European and global logistics (accessed 11 January 2015) [http://www.aaarea.nl/client/aaarea/upload/pdf/AAA\\_Factsheet\\_Logistics\\_DEF\\_2013.pdf](http://www.aaarea.nl/client/aaarea/upload/pdf/AAA_Factsheet_Logistics_DEF_2013.pdf)

<sup>63</sup> DHL Global Connectedness Index 2014 (October 2014)

[http://www.dhl.com/content/dam/Campaigns/gci2014/downloads/dhl\\_gci\\_2014\\_study\\_low.pdf](http://www.dhl.com/content/dam/Campaigns/gci2014/downloads/dhl_gci_2014_study_low.pdf)

<sup>64</sup> Martin Prosperity Institute, Insight – Creative and Diverse: Ranking global cities <http://martinprosperity.org/2013/08/14/insight-creative-and-diverse-ranking-global-cities/>

<sup>65</sup> Creative Amsterdam, Creating Opportunities (March 2008) [http://www.liesbethkrumeich.nl/CCAA\\_brochure.pdf](http://www.liesbethkrumeich.nl/CCAA_brochure.pdf)

<sup>66</sup> Provincie Noord-Holland, Factsheet Creative Industry (accessed 11 January 2015) <http://www.noord-holland.nl/web/file?uuid=18f84c73-1913-47b1-83a5-4278e4a9b56b&owner=31e8a914-fbbd-401f-840b-ed9b6f399a96>

<sup>67</sup> Amsterdam Economic Board, Life Sciences Cluster, Facts and Figures (accessed 11 January 2015) <http://www.amsterdameconomicboard.com/clusters/life-sciences-health/feiten-en-cijfers>

- Finance - Financial and business services employ 26% of the regional labour market and account for 26% of regional GDP. The cluster includes banks, insurance companies, investment companies, holding companies, financial advisors, accounting firms, tax consultants, lawyers and HR companies.<sup>68</sup>
- High-tech materials - the manufacture of high-tech materials employs 94,000 people in the Amsterdam region, across 12,000 companies. The sector is valued at €8.9bn (10% of the Amsterdam Metropolitan Region's gross value added), and has an export value of €20bn (40% of the Metropolitan Region's export value).<sup>69</sup>
- Horticulture and Agri-Food – the Netherlands horticulture sector has a nationwide added value of €10bn. In the Amsterdam region the 1,500 horticulture companies directly employ 15,000 individuals. Agri-food in the Amsterdam region employs 33,000 people across 5,300 companies. It has an added value of €2.7m and provides 8% of the region's exports.<sup>70</sup>

**Workforce:** 44% of Amsterdam's workforce has participated in higher education. The city's regional workforce is multicultural, including people from 178 nationalities, and multilingual, with 80% of the workforce able to speak English and 90% speaking in two or more languages.<sup>71</sup>

In 2013 the Netherlands ranked as sixth on INSEAD's Global Talent Competitiveness index.<sup>72</sup> A recent study by PWC ranked the Netherlands workforce as the most adaptable in the world. This study assessed the *'ability and willingness of employers and employees to adapt to changing circumstances and align skills with available opportunities'*.<sup>73</sup>

**Location and infrastructure:** As noted above, the Netherlands tops DHL's Global Connectedness Survey 2014.<sup>74</sup> Amsterdam Airport is Europe's third largest cargo airport, processing 1.5 million tonnes of cargo per year. The airport travels to 98 destinations globally, provides 323 flight connections and transports 52.5m per year (making it Europe's fourth largest passenger airport).<sup>75</sup>

<sup>68</sup> Amsterdam Economic Board, Financial Cluster, Facts and Figures (accessed 11 January 2015) <http://www.amsterdameconomicboard.com/clusters/financial-business-services>

<sup>69</sup> Amsterdam Economic Board, High-tech materials, Facts and figures (accessed 11 January 2015) <http://www.amsterdameconomicboard.com/clusters/high-tech-materials/feiten-en-cijfers>

<sup>70</sup> Amsterdam Economic Board, Horticulture and Agri-food cluster, Facts and Figures (accessed 11 January 2015) <http://www.amsterdameconomicboard.com/clusters/horticulture-agrifood/feiten-en-cijfers>

<sup>71</sup> I Amsterdam, Amsterdam's attraction to foreign investors (accessed 11 January 2015) <http://www.iamsterdam.com/en/business/invest/news/amsterdam-attraction-to-foreign-investors>

<sup>72</sup> INSEAD, The Global Talent Competitiveness Index 2013 (November 2013) <http://global-indices.insead.edu/gtci/documents/gtci-report.pdf>

<sup>73</sup> PWC, Adapt to survive – How better alignment between talent and opportunity can drive economic growth (2014, accessed 11 January 2015) [http://www.pwc.com/en\\_GX/gx/hr-management-services/publications/assets/linkedin.pdf](http://www.pwc.com/en_GX/gx/hr-management-services/publications/assets/linkedin.pdf)

<sup>74</sup> DHL Global Connectedness Index 2014 (October 2014) [http://www.dhl.com/content/dam/Campaigns/gci2014/downloads/dhl\\_gci\\_2014\\_study\\_low.pdf](http://www.dhl.com/content/dam/Campaigns/gci2014/downloads/dhl_gci_2014_study_low.pdf)

<sup>75</sup> Amsterdam Airport Area, Amsterdam Metropolitan Area: the heart of European and global logistics (accessed 11 January 2015) [http://www.aaarea.nl/client/aaarea/upload/pdf/AAA\\_Factsheet\\_Logistics\\_DEF\\_2013.pdf](http://www.aaarea.nl/client/aaarea/upload/pdf/AAA_Factsheet_Logistics_DEF_2013.pdf)

The Port of Amsterdam is Europe's fourth largest. It handles 95 million tonnes of cargo per year, employs 59075 people and has an annual turnover of €143.3m. It is also a busy cruise port. In 2013 137 cruise liners and 1,483 river cruise liners, carrying a total of 710,000 passengers, used the port. Total value added from maritime industry at the Port of Amsterdam is estimated to be €6bn.<sup>76</sup>

**Digital connectivity:** the Amsterdam Internet Exchange is the world's largest data hub. The exchange interconnects 650 IP networks and its business traffic has a peak of over three terabits per second.<sup>77</sup> The Netherlands is the second most densely cabled country in the world.<sup>78</sup> It has the sixth fastest average internet speeds in the world, and third fastest in Europe.<sup>79</sup> Amsterdam's ICT workforce numbers 250,000 and the region is home to a 33% of Europe's data centres.<sup>80</sup>

**Quality of life:** In the European Commission's Quality of life survey 2013 Amsterdam scores highly areas such as: overall satisfaction (96% satisfaction rate, second in the EU); satisfaction with public transport (80% satisfaction rate, fifth in the EU); satisfaction with health care services (88% satisfaction rate, second in the EU); satisfaction with sports facilities (78% satisfaction rate, third in the EU); satisfaction with cultural facilities (92% satisfaction rate of 92%, fifth in the EU); satisfaction with schools and educational facilities (75% satisfaction rate, sixth in the EU); satisfaction with streets and buildings (79% satisfaction rate, sixth in the EU); satisfaction with public spaces (87% satisfaction rate, fourth in the EU); satisfaction with the availability of shops (92% satisfaction rate, fourth in the EU); housing availability (88% satisfaction rate, third in the EU); and safety (84% satisfaction rate, seventh in the EU).<sup>81</sup>

<sup>76</sup> Port of Amsterdam, Port of Partnerships (accessed 11 January 2015)

[http://www.portofamsterdam.nl/docs/nl/Factsheets/2014/Algemeen\\_UK\\_2014.pdf](http://www.portofamsterdam.nl/docs/nl/Factsheets/2014/Algemeen_UK_2014.pdf)

<sup>77</sup> Amsterdam Internet Exchange, About AMS-IX (access 15 January 2015) <https://ams-ix.net/about/about-ams-ix>

<sup>78</sup> Amsterdam Economic Board, Amsterdam: an unrivalled location for ICT business (accessed 11 January 2015)

<http://www.iamsterdam.com/media/pdf/business-publications/ict-folder.pdf?la=en>

<sup>79</sup> Akami's State of the Internet (Quarter 3, 2014) Amsterdam Economic Board, Amsterdam: an unrivalled location for ICT business (accessed 11 January 2015) <http://www.iamsterdam.com/media/pdf/business-publications/ict-folder.pdf?la=en> (registration required)

<sup>80</sup> Amsterdam Economic Board, Amsterdam: an unrivalled location for ICT business (accessed 11 January 2015)

<http://www.iamsterdam.com/media/pdf/business-publications/ict-folder.pdf?la=en>

<sup>81</sup> European Commission, Quality of life in Cities – perception survey in 79 cities (2013)

[http://ec.europa.eu/regional\\_policy/sources/docgener/studies/pdf/urban/survey2013\\_en.pdf](http://ec.europa.eu/regional_policy/sources/docgener/studies/pdf/urban/survey2013_en.pdf)

## 4 Small regions

### 4.1 Copenhagen Capital Region

#### **Brief**

**Country:** Denmark

**Political Status:** Regional Council

**Population:** 1.7 million

**GDP:** Metropolitan area 42.85% of national GDP 2010 (source: OECD)

**Key industries:** Clean-tech, life science, ICT, transport and logistics, creative industries, and food.

#### 4.1a Why Copenhagen

Copenhagen is ranked as the third best region for FDI overall in the FDI Intelligence European Regions of the Future. It is ranked as the highest performing small region in Europe. It is also ranked first for its FDI strategy and second for economic potential and business friendliness.<sup>82</sup>

#### 4.1b Copenhagen's FDI proposition

In their appraisal of the Danish economy UK Trade and Investment note that it is an attractive investment destination due to its prosperity, its proximity to the Scandinavian and Baltic economies and to the growing economies of Germany, Poland and Sweden. They highlight the following advantages:

- Easy access to Northern Europe via Copenhagen airport hub and a high quality motorway network;
- A well-educated and productive workforce;
- A country where English is widely spoken;
- An advanced telecommunications infrastructure; and,
- A facilitative business start-up environment - a company may be set up in 24 hours online.<sup>83</sup>

<sup>82</sup> FDI Intelligence, European Cities of the Future (2014/15) (February 2014) <http://www.fdiintelligence.com/content/download/53088/1366403/file/European%20Cities%20and%20Regions%20of%20the%20Future%202014:15.pdf>

<sup>83</sup> UK Trade and Investment, Exporting to Denmark (2 July 2014) <https://www.gov.uk/government/publications/exporting-to-denmark/exporting-to-denmark>

Copenhagen City region is Denmark's capital region. According to the area's business development agency, Copenhagen Capacity, the region's FDI proposition is predicated upon market access and connectivity, business climate (including taxation), investment promotion agency, existing business clusters, research and innovation status, labour market flexibility, workforce talent, and quality of life.

**Market access and connectivity:** Copenhagen provides a link between continental Europe and Scandinavia. The region's main airport, located 10km from Copenhagen city centre, connects to 134 global destinations and provides flights on 24 hour basis. It is the largest cargo airport in Northern Europe, with direct flights to 31 cargo destinations and handling 360,000 tonnes of cargo per year. The region's port is one of the largest in the Nordic area.<sup>84</sup>

**Business climate:** the World Bank's ease of doing business report 2015 ranks Denmark as fourth globally, and first in Europe.<sup>85</sup> Foreign companies benefit from a 'plug and play' business registration. This enables businesses to be set up with-in 24 hours.<sup>86</sup>

Corporation tax in Denmark is currently set at 24.5%, but will be reduced to 22% by 2016 – bringing it below the EU average.<sup>87</sup> Denmark does not charge double taxation on Danish countries with branches abroad making the country an attractive location for business wishing to set up a Scandinavian headquarter. Companies may also access a full rebate of tax expenses associated with R&D expenditure. In addition, companies do not incur social security contributions for employees. The country does not charge local, franchise, capital duty, share transfer or net wealth taxes. A special tax regime is in place for expatriate staff and researchers working with in Denmark ensuring they pay a reduced rate of tax for their first five years working in the country. In addition, employees from outside Denmark, who are living in working in the country, are entitled to full access to the Danish welfare system.<sup>88</sup>

**Investment promotion agency:** Copenhagen Capacity is the region's investment promotion agency. It provides business with:

- Market insights;
- Industry knowledge;
- Business start-up assistance;
- Land and property searches;

<sup>84</sup> Copenhagen Capacity Copenhagen and the World (accessed 09 January 2015) <http://www.copcap.com/ExploreCopenhagen>

<sup>85</sup> The World Bank Doing Business 2015 Going Beyond Efficiency (October 2014) <http://www.doingbusiness.org/~media/GIAWB/Doing%20Business/Documents/Annual-Reports/English/DB15-Full-Report.pdf>

<sup>86</sup> Ministry of Foreign Affairs, Denmark, 10 Good Reasons to Invest in Denmark (accessed 09 January 2015) <http://www.investindk.com/Why-Denmark/10-good-reasons>

<sup>87</sup> Note: Average EU-28 corporation tax rate is 22.9% 2014, for the EU 27 it is 23.1% see page 37 of [http://ec.europa.eu/taxation\\_customs/resources/documents/taxation/gen\\_info/economic\\_analysis/tax\\_structures/2014/report.pdf](http://ec.europa.eu/taxation_customs/resources/documents/taxation/gen_info/economic_analysis/tax_structures/2014/report.pdf)

<sup>88</sup> Copenhagen Capacity, Taxation (accessed 09 January 2015) <http://www.copcap.com/ExploreCopenhagen/Taxation>



- Partner searches and match making; and
- Business development assistance.<sup>89</sup>

The agency successfully assisted 263 investment projects between 2004 and 2011. It is staffed by 53 employees and can provide assistance in 17 languages.<sup>90</sup>

**Existing business clusters.** Key industry sectors within the Copenhagen City region are as follows:

- Clean-tech – there are more than 600 clean-tech companies in the region, employing 77,500 people, 34,000 of which work directly with clean-tech (as opposed to ancillary roles). In 2010, Danish exports stemming from green technologies, goods and services was 10.4% of total exports. The Danish government is politically focussed on renewable and sustainable energy, with a long-term goal of meeting all electricity, heating, industry and transport energy needs through renewable energy by 2050. Copenhagen is aiming to become the world's first carbon neutral city by 2025. The existing business cluster has access to a number of research institutions specialising in clean-tech: Risø National Laboratory for Sustainable Energy; University of Copenhagen; Denmark's Technical University; University of Roskilde and Copenhagen Business School; Scion Science Park; and Copenhagen Clean-tech Park.<sup>91</sup> Copenhagen topped the Siemen's European Green Cities Index in 2014.<sup>92</sup>
- Life sciences – the bio-tech sector in Denmark was valued at €15.3bn in 2011. The medical technology sector was valued at €6.7bn in 2010. A significant proportion of the country's life science industry is located in the Copenhagen City region including six large R&D based pharmaceutical companies, over 50 R&D active biotech companies and 200 R&D active medical technology companies. Approximately 44,000 people are employed in the life sciences private sector. The region is also home 11 universities, five of which have separate life science departments. There are 33 hospitals in the Copenhagen City region, 11 of which are university hospitals. There are approximately 45,000 life science students studying in the region.<sup>93</sup>
- ICT – approximately 50,000 people are employed in the Øresund Region (a region that centres on Copenhagen and the Swedish city of Malmö). The ICT cluster in this region is the 12<sup>th</sup> largest in Europe. Switzerland's IMD World Competitiveness Centre ranks Denmark in the top 5 (out of 59 countries) in the areas of cyber security, broadband subscribers, communications technology, connectivity of people and firms, technology regulation, technological cooperation, information technology skills, computers per capita, development and application of technology, and

<sup>89</sup> Copenhagen Capacity, Our Business Services (accessed 14 January 2014) <http://www.copcap.com/OurBusinessServices>

<sup>90</sup> *Ibid*

<sup>91</sup> Copenhagen Capacity, Cleantech Background (accessed 09 January 2014) <http://www.copcap.com/BusinessOpportunities/Cleantech/Background>

<sup>92</sup> Siemen's European Green Cities Index 2014 (accessed 14 January 2015) <http://www.siemens.com/entry/cc/en/greencityindex.htm>

<sup>93</sup> Copenhagen Capacity, Business Opportunities, Life Science Facts and Figures <http://www.copcap.com/BusinessOpportunities/Life%20science/Facts>

qualified engineers. There are eight universities in Denmark providing education in ICT related areas, as well nine Danish research and technology organisations. In addition, Copenhagen is home to, or in close proximity, to four science parks.<sup>94</sup>

- Transport and Logistics – the transport and logistics cluster in Copenhagen spans air, road, and maritime transport. It employs 85,000 people, of which 47,000 work directly with international transport. The industry cluster is Denmark's largest export cluster accounting for 22% of total national exports (valued at DKK170bn, approximately €23bn, at current rates – 11 January 2015). The cluster's annual turnover is valued at DKK240bn (approximately €32bn, at current rates – 11 January 2015).<sup>95</sup>
- Creative industries – the creative industries employees 85,000 across Denmark. The sector accounts for 6%-7% of Danish employment and revenue and contributes to 10% of Danish exports.<sup>96</sup> Copenhagen was ranked sixth on the 2013 Martin Prosperity Institute's Global Cities Index.<sup>97</sup>
- Food – the food sector makes a significant contribution to the Danish economy. It provides 150,000 full-time jobs (5-6% of total employment). The export value of the sector was valued at DKK139bn in 2011 (approximately € 18.7bn, at current rates – 11 January 2015). Foreign food manufacturers have invested DKK45bn in Denmark (approximately €6bn, at current rates – 11 January 2015). The food sector recorded 6% of R&D projects in 2008.<sup>98</sup>

**Research and Innovation:** According to the European Commission's Regional Innovation Monitor the Copenhagen City Region performance in Research, Development and Innovation is strong. It was ranked as an innovation leader in the Regional Innovation Scoreboard 2014.

The region is home to a number of large and top-performing universities including the University of Copenhagen (the largest university in Northern Europe), the Technical University of Denmark and the Copenhagen Business School. 59% of all Danes with higher education live in the region.

A number of leading global companies are based in Copenhagen and 80% of all high-tech businesses in Denmark are located there. It has the highest level of R&D expenditure in Denmark, 4.3% of regional GDP is spent on R&D compared to 2.5% of GDP at national level (2011 figures). Public sector expenditure on R&D in the Copenhagen region is above average for EU regions. Similarly, the amount of in-house

<sup>94</sup> Copenhagen Capacity, Business Opportunities, ICT Facts and Figures  
<http://www.copcap.com/BusinessOpportunities/ICT/Facts>

<sup>95</sup> Copenhagen Capacity, Business Opportunities, Transport and Logistics Facts and Figures  
<http://www.copcap.com/BusinessOpportunities/TransportAndLogistics/Facts>

<sup>96</sup> Copenhagen Capacity, Business Opportunities, Creative Industries Facts and Figures  
<http://www.copcap.com/BusinessOpportunities/Creative%20Industries/Facts>

<sup>97</sup> Martin Prosperity Institute, Insight – Creative and Diverse: Ranking global cities <http://martinprosperity.org/2013/08/14/insight-creative-and-diverse-ranking-global-cities/>

<sup>98</sup> Copenhagen Capacity, Food Sector Facts and Figures (accessed 12 January 2015)  
<http://www.copcap.com/BusinessOpportunities/Foods/Facts>

innovation undertaken by SMEs in the Copenhagen region is above the average for EU regions.<sup>99</sup>

**Workforce talent:** The percentage of 25-64 years olds who have completed tertiary education in the Copenhagen region is 86.3%, the proportion of individuals employed in knowledge intensive industry 77%.<sup>100</sup>

Denmark is ranked third on INSEAD's Global Talent Competitiveness index.<sup>101</sup> The Swiss business school IMD's World Talent Report 2014 ranks Denmark as second for talent overall. The country scores highly on the following measures: investment and development (first); worker motivation (first); readiness of workforce (fourth); and the ability of the university sector to meet the needs of business (fifth).<sup>102</sup>

According to Copenhagen's business promotion agency Copenhagen Capacity, the city region offers employers access to:

- Scandinavia's largest recruitment base of highly-skilled Danish and Swedish employees;
- Scandinavia's biggest pool of private and publicly employed researchers;
- 44,000 employees in the private life science sector;
- 75,000 employees in the clean-tech industry, of which 34,000 are directly employed in green jobs;
- A bilingual/multilingual workforce – 86% of Danes speak English and 58% speak German.<sup>103</sup>

**Quality of life:** Copenhagen performed well in the European Commission's 2013 Quality of life in cities survey. It was ranked first for overall satisfaction to live in the city (97% satisfaction rate) and scored highly on measures such as: satisfaction with health care service (84% satisfaction rate, ranked sixth overall); satisfaction with cultural facilities (91% satisfaction rate, ranked sixth overall); satisfaction with state of streets and buildings (78% satisfaction rate, ranked sixth overall); satisfaction with public spaces (88% satisfaction rate, ranked third overall); agreement that presence of foreigners is good for the city (89% agreement rate, ranked first overall); safety (92% felt safe in the city, ranked first overall); trust (86% felt that most people in the city could be trusted, ranked first overall); efficiency of public services (63% believed public

<sup>99</sup> European Commission, Regional Innovation Monitor, Denmark, Hovedstaden (accessed 12 January 2015)

<http://ec.europa.eu/enterprise/policies/innovation/policy/regional-innovation/monitor/base-profile/capital-region-denmark-0>

<sup>100</sup> *Ibid*

<sup>101</sup> INSEAD, The Global Talent Competitiveness Index 2013 (November 2013) <http://global-indices.insead.edu/gtci/documents/gcti-report.pdf>

<sup>102</sup> IMD World Talent Report 2014 (November 2014) [http://www.imd.org/uupload/imd.website/wcc/NewTalentReport/IMD\\_World\\_Talent\\_Report\\_2014bis.pdf](http://www.imd.org/uupload/imd.website/wcc/NewTalentReport/IMD_World_Talent_Report_2014bis.pdf)

<sup>103</sup> Copenhagen Capacity, Highly Skilled and efficient employees (accessed 12 January 2015) <http://www.copcap.com/ExploreCopenhagen/Talent%20and%20work%20force>

services helped people efficiently, ranked third overall); and satisfaction with green spaces and parks (91% satisfaction rate, ranked first).<sup>104</sup>

## 4.2 Greater Zurich

### Brief

**Country:** Switzerland

**Political Status:** Metropolitan Area

**Population:** 1.9 million (in metropolitan area, source: Stadt Zurich)

**GDP:** Metropolitan area 18.95% of national GDP 2010 (source: OECD)

**Key industries:** finance; life science; ICT; clean-tech; high-tech; mechanical, electrical and metalworking; headquarters.

### 4.2a Why Greater Zurich

Greater Zurich is ranked eighth of all European regions in the FDI Intelligence European Regions of the Future. It is classed as a small region and is ranked third overall in this category scoring highly on following measures: economic potential (first); FDI strategy (second); infrastructure (third); and human capital and lifestyle (fifth).<sup>105</sup>

### 4.2b Greater Zurich's FDI proposition

Greater Zurich is the 'business centre' of Switzerland, a country that was ranked as the world's most competitive economy according to the World Economic Forum's (WEF) Global Competitiveness Report 2014/15. In the UK Government's assessment the Swiss market has a number of strengths:

- Centrally located in Europe;
- Politically and financially stable;
- High productivity;
- Excellent public infrastructure;
- A highly educated workforce;
- An innovative country;

<sup>104</sup> European Commission, Quality of life in Cities – perception survey in 79 cities (2013)  
[http://ec.europa.eu/regional\\_policy/sources/docgener/studies/pdf/urban/survey2013\\_en.pdf](http://ec.europa.eu/regional_policy/sources/docgener/studies/pdf/urban/survey2013_en.pdf)

<sup>105</sup> FDI Intelligence, European Cities of the Future (2014/15) (February 2014)  
<http://www.fdiintelligence.com/content/download/53088/1366403/file/European%20Cities%20and%20Regions%20of%20the%20Future%202014:15.pdf>

- Purchasing power amongst the world's highest;
- High spend on research and development (R&D) and technology;
- Reliable business, legal and regulatory environment; and
- Low Value Added Tax (VAT) compared to other EU countries.<sup>106</sup>

The Greater Zurich Area's business promotion agency (Greater Zurich Area AG) promotes Zurich as a FDI destination along the following lines: market access; taxation; purchasing power; investment proportion agency support; existing sectors and clusters; workforce and labour market; connectivity; and research, development and innovation performance.

**Market access:** In terms of market access although Switzerland is not part of the EU its relationship with the EU is governed by a series of bilateral agreements. As a result of these agreements, the EU has:

*...closer ties with Switzerland than with any other non-European Economic Area (EEA) country. Switzerland is the EU's 4th largest trading partner, while the EU is Switzerland's largest. Over 1 million EU citizens live in Switzerland, and another 230,000 cross the border daily to go to work. Some 430,000 Swiss citizens live in the EU.<sup>107</sup>*

As of 1 January 2015, Switzerland had entered into 33 free trade agreements<sup>108</sup> with countries and unions of states around including China. Five additional trade agreements are in the process of negotiation.<sup>109</sup> Through free trade agreements, countries enter into legally binding commitments to relax access to each other's markets for goods and services.<sup>110</sup>

**Taxation:** The Swiss tax system is attractive. The tax system is shaped by the country's federal structure. Companies and individuals are taxed at three levels:

- National level – federal tax;
- Cantonal level (Switzerland is made up of 26 cantons)– cantonal tax; and
- Communal level (Swiss cantons are further divided up into municipalities known as communes) – communal tax.

Cantons and communes charge the largest proportion of taxes. Each canton has its own tax laws and levels (although taxes are collected by a single agency), as a result there is a degree of competition between cantons in this area.

<sup>106</sup> UK Trade and Investment, Guidance: Doing business in Switzerland: Switzerland trade and export guide (update 7 November 2014) <https://www.gov.uk/government/publications/exporting-to-switzerland/exporting-to-switzerland#switzerland-export-overview>

<sup>107</sup> European Union, External Action, Switzerland (accessed 08 January 2015) [http://eeas.europa.eu/switzerland/index\\_en.htm](http://eeas.europa.eu/switzerland/index_en.htm)

<sup>108</sup> This figure includes the EU

<sup>109</sup> Switzerland Federal Administration, State Secretariat for Economic Affairs SECO (updated 01 January 2015) <http://www.seco.admin.ch/themen/00513/00515/01330/04619/?lang=en>

<sup>110</sup> UK Trade and Investment, Guidance: Doing business in Switzerland: Switzerland trade and export guide (update 7 November 2014) <https://www.gov.uk/government/publications/exporting-to-switzerland/exporting-to-switzerland#switzerland-export-overview>

With regard to corporation tax, companies are taxed at the place of value creation – where it is based or where it carries out its business activities. Federal corporation tax is charged at a flat rate, but cantonal tax varies by place and often by profit levels or capital. Taxes are levied within the following ranges:

- Direct federal taxes on profits: 8.5%<sup>111</sup>;
- Cantonal tax on profits: 5.9% - 16%;
- Cantonal tax on capital: 0.05% - 0.3%; and
- Total tax burden: 14.5% - 25%.<sup>112</sup>

The Greater Zurich Area incorporates a number of cantons – Zurich, Glarus, Grisons, Schaffhausen, Schwyz, Solothurn and Zug. Effective corporation tax rates in these cantons vary, but all are below the EU average (22.9% as of 2014<sup>113</sup>):

- Zurich: 21.17%;<sup>114</sup>
- Glarus: 15.71%<sup>115</sup>
- Grisons; 16.7%<sup>116</sup>
- Schaffhausen; 15.96%<sup>117</sup>
- Schwyz; 11.56%<sup>118</sup>
- Solothurn; 21.80% 2013)<sup>119</sup>
- Zug: 15.38%<sup>120</sup>

Tax optimisation is possible. Companies may be able to secure a binding tax ruling for their effective tax burden from the Swiss tax authorities. Through this it is possible for a company to have a tax rate of below 10%. These benefits are granted on a case by case basis and are dependent on the location and type of business.<sup>121</sup>

<sup>111</sup> Note Direct federal taxes are charged at a regular rate of 8.5%. These are levied on after-tax profit, yielding an effective tax rate of 7.83%.

<sup>112</sup> Startups.ch Taxation (accessed 08 January 2015) <https://www.startups.ch/en/inform/foreignentrepreneurs/taxation/>

<sup>113</sup> [http://ec.europa.eu/taxation\\_customs/resources/documents/taxation/gen\\_info/economic\\_analysis/tax\\_structures/2014/report.pdf](http://ec.europa.eu/taxation_customs/resources/documents/taxation/gen_info/economic_analysis/tax_structures/2014/report.pdf)

<sup>114</sup> PWC, Switzerland: an excellent choice – from a tax and business point of view (accessed 08 January 2015) [http://www.pwc.ch/user\\_content/editor/files/chall\\_adv/pwc\\_switzerland-an-excellent-choice\\_e.pdf](http://www.pwc.ch/user_content/editor/files/chall_adv/pwc_switzerland-an-excellent-choice_e.pdf)

<sup>115</sup> Kanton Glarus, Location Factor taxes (January 2014)

[http://www.glarus.ch/documents/Canton\\_Glarus\\_Executive\\_Summary\\_January\\_20141392824525652.pdf](http://www.glarus.ch/documents/Canton_Glarus_Executive_Summary_January_20141392824525652.pdf)

<sup>116</sup> KPMG Clarity on Investment in Switzerland (August 2014) <https://www.kpmg.com/CH/en/Library/Articles-Publications/Documents/Tax/pub-20140805-investment-switzerland-en.pdf>

<sup>117</sup> PWC, Switzerland: an excellent choice – from a tax and business point of view (accessed 08 January 2015) [http://www.pwc.ch/user\\_content/editor/files/chall\\_adv/pwc\\_switzerland-an-excellent-choice\\_e.pdf](http://www.pwc.ch/user_content/editor/files/chall_adv/pwc_switzerland-an-excellent-choice_e.pdf)

<sup>118</sup> *Ibid*

<sup>119</sup> Institute for Research in Economic and Fiscal Issues, Taxation in Europe Yearbook 2013 – Switzerland <http://en.irefeurope.org/Switzerland.a0915>

<sup>120</sup> PWC, Switzerland: an excellent choice – from a tax and business point of view (accessed 08 January 2015) [http://www.pwc.ch/user\\_content/editor/files/chall\\_adv/pwc\\_switzerland-an-excellent-choice\\_e.pdf](http://www.pwc.ch/user_content/editor/files/chall_adv/pwc_switzerland-an-excellent-choice_e.pdf)

<sup>121</sup> Startups.ch Taxation (accessed 08 January 2015) <https://www.startups.ch/en/inform/foreignentrepreneurs/taxation/>

Special tax status is available for holding companies (7.83%) and for domiciliary companies, mixed companies and principal companies (ranging from 4%-11%).<sup>122</sup>

Individual taxes in Switzerland are also competitive. The combined tax rate of Federal, Cantonal, Communal and Church tax in the Greater Zurich area ranges from 23.15% in Schwyz to 39.18% in Zurich. Personal deductions are available, these depend on the status of each person – marriage status and number of dependent children for example.<sup>123</sup> Social security expenses and certain business expenses are tax deductible.<sup>124</sup>

Vat rates in Switzerland are amongst the lowest in Europe. The standard rate is 8%; certain goods (such as food, agricultural products and medicine) are taxed at a rate of 2.5%.<sup>125</sup>

**Investment promotion agency support:** Greater Zurich AG assists potential investors in a number of ways:

- Market analysis;
- Industry insights;
- Advice on business development;
- Networking assistance; and
- Property searches.<sup>126</sup>

**Existing sectors and clusters:** A key aspect of Greater Zurich's FDI proposition is its status as a financial centre. It was second highest ranked European financial centre (behind London) Global Financial Centres Index 2014 and is ranked fifth overall (behind New York, London, Hong Kong and Singapore).<sup>127</sup> Over two thirds of Swiss banks are headquartered in Zurich, including both of the leading banks (UBS and the Credit Suisse Group). Swiss and foreign financial institutions, including those offering specialised services such as hedge fund management, are located in the area. The presence of an established financial centre creates a number of draw factors for potential investors, particularly those working in the financial sector:

- A large pool of highly-qualified specialists
- Required service providers for the financial sector are close at hand; and

<sup>122</sup> PWC, Switzerland: an excellent choice – from a tax and business point of view (accessed 08 January 2015) [http://www.pwc.ch/user\\_content/editor/files/chall\\_adv/pwc\\_switzerland-an-excellent-choice\\_e.pdf](http://www.pwc.ch/user_content/editor/files/chall_adv/pwc_switzerland-an-excellent-choice_e.pdf)

<sup>123</sup> Santander Trade, Switzerland Tax System (accessed 14 January 2015) <https://en.santandertrade.com/establish-overseas/switzerland/tax-system>

<sup>124</sup> KPMG Clarity on Investment in Switzerland (August 2014) <https://www.kpmg.com/CH/en/Library/Articles-Publications/Documents/Tax/pub-20140805-investment-switzerland-en.pdf>

<sup>125</sup> Santander Trade, Switzerland Tax System (accessed 14 January 2015) <https://en.santandertrade.com/establish-overseas/switzerland/tax-system>

<sup>126</sup> Greater Zurich AG, Our services, (accessed 14 January 2015) <http://www.greaterzuricharea.com/en/services/>

<sup>127</sup> Long Finance, Financial Centres Future, the Global Financial Centres Index 15 (March 2014) [http://www.longfinance.net/images/GFCI15\\_15March2014.pdf](http://www.longfinance.net/images/GFCI15_15March2014.pdf)



- Reliable infrastructure, such as secure power supply and the most modern data lines.<sup>128</sup>

Other key sectors well established in the Greater Zurich area include:

- **Life sciences:** 365 life sciences companies in Zurich (2013) including international companies working in pharmaceuticals, biotech and medical technology (such as Bayer Ag, Zimmer and Stryker). The sector employs 21,000 people and has a total turnover of CHF46.1bn.<sup>129</sup>
- **ICT:** Greater Zurich is home to information technology, media and creative ICT sub-industries, including companies such as Disney Research Zurich, Evernote, Google, Google Research, Uber, IBM Research Lab and Kayak. According to the Great Zurich Area AG (the areas promotion and marketing body) these companies are drawn by the areas central location, research institutions and the high quality of living;
- **Clean-tech:** public sector support has helped develop green industry in the area, which specialises in spatial planning, building services, water and waste management services. Key draw factors have included – research institutions, the ‘Swiss-made’ brand (and associated international appeal), environment and research friendly legislation, and the location;
- **High-tech:** a number of high-tech or cutting edge technology companies are based in the Zurich area, including those specialising in areas of work such biotechnology, materials science, sensor technology, mechatronics, photonics and optoelectronics. The key draw for these companies is the area’s research centres and the availability of specialists and the potential for technology transfers (more on this below);<sup>130</sup>
- **Mechanical, electrical and metalworking (MEM) industry:** an established, export focussed industry, MEM is support by the Swiss vocational training system and the resultant talent pool;<sup>131</sup> and
- **Headquarters:** the Greater Zurich area has been successful in attracting a number of business head offices. Draw factors have included: a central European location; attractive business and individual tax rates; public services; liberal labour laws and an attractive job market; quality of life; low ancillary wage costs; and infrastructure.<sup>132</sup>

**Workforce and labour market:** The Global Competitiveness Survey 2014-15 ranks Switzerland as first labour market efficiency, the country scores highly on the following

<sup>128</sup> Greater Zurich Area, Swiss Financial Service Sectors: Globally Significant <http://www.greaterzuricharea.com/en/why-greater-zurich-area/industries/financial-services/>

<sup>129</sup> Greater Zurich Area AG, Life Sciences: Strong in Switzerland <http://www.greaterzuricharea.com/en/why-greater-zurich-area/industries/life-sciences/>

<sup>130</sup> Greater Zurich Area AG High-Tech "Made in Switzerland" (accessed 08 January 2015) <http://www.greaterzuricharea.com/en/why-greater-zurich-area/industries/high-tech/>

<sup>131</sup> Greater Zurich Area AG "Swiss Machinery": Unlimited Talent Pool (accessed 08 January 2015) <http://www.greaterzuricharea.com/en/why-greater-zurich-area/industries/machinery/>

<sup>132</sup> Greater Zurich Area AG Why Headquarters Are Moving to Switzerland (accessed 08 January 2015) <http://www.greaterzuricharea.com/en/why-greater-zurich-area/industries/headquarters/>

measures: cooperation in labour-employee relations (ranked first); efficient use of talent (ranked first); capacity to retain talent (ranked first); capacity to attract talent (ranked first); hiring and firing practice (ranked second); labour market flexibility (ranked fourth); and pay and productivity (ranked fifth).<sup>133</sup> According to the Greater Zurich AG area is attractive to employers due to a labour market that:

- Has amongst the most liberal labour laws in Europe;
- Is Multilingual, internationally experienced and highly educated; and
- Is Cosmopolitan - Switzerland has signed up to the EU's free movement of people and recruitment from Asian and the USA is a 'routine procedure'.<sup>134</sup>

**Research, Development and Innovation:** The World Economic Forum's Global Competitiveness Report ranks Switzerland as second on its innovation measure. Within this measure the country scores highly in the following areas: capacity for innovation (ranked first); quality of scientific research institutions (ranked first); company spending on R&D (ranked first); university industry collaboration (ranked third); and Patent Cooperation Treaty patent applications (ranked first).<sup>135</sup>

Greater Zurich is home to a number of research institutions including:

- ETH Zurich;
- The University of Zurich;
- The Swiss Federal Laboratories for Material Testing and Research;
- IBM Zurich Research Laboratory;
- The Paul Scherrer Institute;
- The Swiss Centre for Electronics and Micro-technology;
- Google European Engineering Centre; and
- Disney Research Zurich.<sup>136</sup>

**Connectivity:** The World Economic Forum ranks Swiss infrastructure as fifth in their Global Competitiveness Report 2014/15. This is largely predicated on the quality of its overall infrastructure, railways, roads, air transport, and electricity supply – Switzerland is ranked in the top ten on each of these measures (first, second, ninth, eighth, and first respectively).<sup>137</sup> The Country is also ranked sixth on the DHL Global Connectedness Index 2014.<sup>138</sup>

<sup>133</sup> World Economic Forum, Global Competitiveness Report 2014-15, Economy Profiles - Switzerland (accessed 12 January 2015) <http://reports.weforum.org/global-competitiveness-report-2014-2015/economies/#economy=CHE>

<sup>134</sup> Greater Zurich Area AG, Outstanding Business Environment (accessed 08 January 2015) <http://www.greaterzuricharea.com/en/why-greater-zurich-area/business-environment/>

<sup>135</sup> World Economic Forum, Global Competitiveness Report 2014-15, Economy Profiles - Switzerland (accessed 12 January 2015) <http://reports.weforum.org/global-competitiveness-report-2014-2015/economies/#economy=CHE>

<sup>136</sup> Greater Zurich Area AG, Adding Value: Intellectual Property Management in the Greater Zurich Area (May 2013) [http://www.greaterzuricharea.com/fileadmin/PDF/MMM\\_Intellectual\\_A4\\_en.pdf](http://www.greaterzuricharea.com/fileadmin/PDF/MMM_Intellectual_A4_en.pdf)

<sup>137</sup> *Ibid*

<sup>138</sup> DHL Global Connectedness Index 2014 (October 2014) [http://www.dhl.com/content/dam/Campaigns/gci2014/downloads/dhl\\_gci\\_2014\\_study\\_low.pdf](http://www.dhl.com/content/dam/Campaigns/gci2014/downloads/dhl_gci_2014_study_low.pdf)

Greater Zurich itself is a central location well connected by road, rail and air. Zurich's international airport is an air traffic hub, connecting to 184 destinations, carrying 25 million passengers and handling 415,362 tonnes of freight in 2013.<sup>139</sup>

## 5 Summary and conclusions

The FDI proposition of the cases explored show a number of features.

**Nordrhein-Westfalen:** NRW benefits from its location in central Europe. This logistical advantage is fully supported by a developed transport infrastructure. The region has a strong industrial heritage, which has been further enhanced by becoming world leading in new futuristic industries. While the tax burden on companies is average by European standards, there exist incentives at federal and regional level to encourage investment. In addition to this the investment promotion agency NRW Invest is highly active globally and endeavours to create and maintain clusters of collaboration between industry and research institutes in NRW's key industries.

**Scotland:** Scotland's FDI success is based on a number of features. The natural resources which exist in the North Sea give Scotland a significant advantage and have positive externalities on other industries due to the employment and high salaries generated in the oil and gas industry. Scotland's natural landscape also provides opportunities for the creative industries and can prove alluring for investors looking to commission a film or TV series. The high number of quality universities and high concentration of graduates make Scotland an attractive proposition for businesses looking to invest. The relationship between universities and investment can be viewed in the success of the Dundee gaming cluster. Furthermore, these advantages are enhanced again by an active investment promotion agency and UK wide tax incentives which encourage innovative and creative projects.

**Greater Stockholm:** The success of the Stockholm region is based on their success in high-tech industry. This is most evident in two leading clusters which exist in Stockholm, Robot Valley which specialises in automation, and the Kista Science City which specialises in IT. These two examples have been aided in their development by Stockholm's impressive IT infrastructure, which has often been ahead of the global trend. The capacity for innovation which exists in Stockholm's industry, as well as in Sweden as a whole is evident in high R&D spend, can also attribute for Sweden's success in technologically advanced industries. Sweden's competitive levels of corporation tax, as well as tax relief offered to key foreign personnel, coupled with an impressive lifestyle proposition make it an attractive location for foreign investment.

**The Amsterdam Region:** the Amsterdam region attracts considerable amounts of foreign investment and outside companies account for 15% of the region's employment rates. A number of factors underpin the region's FDI proposition. The corporate tax

<sup>139</sup> Greater Zurich AG, Why Greater Zurich, Swiss Infrastructure – Your connection to success (accessed 12 January 2015) <http://www.greaterzuricharea.com/en/why-greater-zurich-area/business-environment/>

regime offers incentives to companies including lower tax rates on their first €200,000 and tax breaks on R&D activity. The region's personnel tax rate is beneficial to expat workers and R&D professionals. Amsterdam has demonstrated strong performance and is internationally recognised in the ICT, Logistics, creative, life science, finance, high-tech and food sectors. It is home to a multicultural, multilingual, educated and adaptable workforce. It is a well-connected area both in terms of logistic infrastructure and digital connectivity. It scores highly on the European Commission's Quality of life survey, with 96% of residents recording overall satisfaction with their quality of life (topping the survey on this measure).

**Copenhagen Capital Region:** Denmark is internationally recognised for its business climate, with the World Bank ranking it as the top European region in its Ease of doing business report. Companies may be set up within 24 hours. Its corporation tax rate is currently above the EU average, but the country plans to lower the tax to 22% by 2016. Tax breaks are available for R&D and a special tax rate is available for expat workers and researchers. The Copenhagen Capital Region has number of strong performing and internationally recognised sectors: Clean-tech; life sciences; ICT; transport and logistics; creative industries and food. The area is well connected offering a links between Northern and Continental Europe. The region performs well in R&D and innovation and its workforce is ranked highly in international measures of competitiveness. The region performed well in the European Commission's Quality of life survey; with 97% of residents expressing satisfaction with the quality of life on offer there – the highest satisfaction rate in the EU.

**Greater Zurich Area:** Switzerland is ranked as the world's most competitive economy and the Greater Zurich area is viewed as the country's business centre. Despite not being a member of the EU bilateral agreements ensure the country has a close relationship with EU. Corporate tax rates in the Zurich at 21.17% are below the EU average. Tax incentives enable a much more favourable corporation tax for companies who secure a binding agreement with tax authorities, for holding companies and for domiciliary, mixed and principal companies. The region's financial centre is second only to London in Europe. The region performs well in other sectors, including life sciences, ICT, Clean-tech, high-tech, mechanical, electrical and metalworking, headquarters. Switzerland's workforce is ranked as the most competitive in the world. The country's R&D and Innovation performance is ranked as the second best by the world economic forum. The Zurich area is central to the country's research base and is home to a number of public and private research institutions. It a well-connected city and has been recognised as such by both the World Economic Forum and the DHL Connectedness Index.

Overall the FDI propositions of the regions outlined above demonstrate a number of areas of commonality. Each region promotes itself as an investment destination through a holistic approach. They sell a package of features rather than emphasising one particular feature or incentive.

Key aspects appear throughout the case studies:

- Each region is part of a strong national economy;
- Tax rates are often a selling point. In particular tax incentives which enable corporations to lower the effective rate of tax. These take a number of forms (with Great Zurich/Switzerland showing the greatest variety and the potentially lowest rate of effective tax), although special tax rates are often provided for R&D activity. Individual taxes are important too, for example Copenhagen and Amsterdam regions operate special tax regimes for expat workers which act as a draw factor for talent;
- The business climate and support structure are significant in a number of cases. The example of Scotland and Nordrhein-Westfalen show the role a strong investment promotion agency can play and the value of incentives. Copenhagen's ease of business ranking and the ability to set-up a business within a 24 hour period are notable advantages. The investment agencies of other regions such as Greater Zurich AG, Copenhagen Capacity and I Amsterdam offer businesses take an advisory role offering business support such as market and industry insights, property and talent searches and advice on legal and tax matters.
- Connectivity, whether digitally or traditional infrastructure, is common selling point. Amsterdam is a particularly strong example of the significance of connectivity – its data hub has encourage a third of European data centres to set up there, and its port and airport facilities aid the region's global recognition as a connected city and the development of a significant logistics industry;
- In addition to offering companies access to domestic markets each regions position within the EU, or in the case of Greater Zurich its agreements with the EU, offers investors access to this wider market;
- Each area has a range of high performing existing business sectors. Often these have a positive international reputation such as Zurich's financial sector, Copenhagen's clean-tech industry and Stockholm's automation industry. Furthermore, the regions examined often demonstrate a high concentration of already existing FDI.
- A number of regions demonstrate the importance of historic industrial development. Nordrhein-Westfalen's industrial past, the 'Swiss Made' brand and Amsterdam's port all have historic roots that continue to serve the regions well today;
- Exploiting local advantages is also a common factor – some advantages include location (Nordrhein-Westfalen's central location, or Copenhagen's gateway to Northern Europe) and natural resources (such as Scotland's oil and gas industry);
- Workforce talent and education – a talented workforce is a selling point for all regions. The selling point of high levels of university graduates among the work force is often enhanced by the workforce being bilingual and/or multilingual;
- R&D and innovation – all regions examined perform well in R&D and innovation. They are strong in R&D and innovation intensive industries (such as high-tech,

clean-tech and creative industries) and are home to universities and research institutions.

- Quality of life – quality of life is a selling point for a number of regions. This is particularly true of the Copenhagen and Amsterdam regions that score highly in the European Commission's Quality of life in cities survey 2013. Similarly Greater Stockholm's planning policy, that ensure that no one is more than 350 metres away from a green space and its public health services, have been cited as key aspects in the enhancing the area's attractiveness as a destination.