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Thema: Exploring the offshoring approach of German Companies compared to to the U. S. American approach

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List of Acronyms

SMEs small and medium enterprises 1, 16, 17, 18, 28

FDI foreign direct investment 5, 14, 17, 18, 28, 32

WWII Second World War 6, 9, 14

WTO World Trade Organization 7

NAFTA North American Free Trade Agreement 7, 10

EEC European Economic Community 7, 14

ICT Information and Communication Technology 7, 8, 12

ARPANET Advanced Research Projects Agency Network 9

BEA Bureau of Economic Analysis 13

GDR German Democratic Republic 14, 15

FRG Federal Republic of Germany 14

NATO North Atlantic Treaty Organization 14

GDP gross domestic product 18

SLA service level agreement 26, 28

KPI key performance indicator 26

AMS Application Management Service 32

2 Offshoring in Literature

Offshoring has been widely studied in the past decades. There are two major branches of research: the first describes reality through statistics or case studies (e.g. Rottman and Lacity, 2008 and Pedersen et al., 2013) while the second branch designs trade models to explain the discovered correlations (e.g. Antràs and Helpman, 2004, Grossman and Rossi-Hansberg, 2008 and Helpman, 1999).

This wealth of existing knowledge has been used for the following section, where the relevant terms of the subject are defined first. Furthermore, a brief history of offshoring is given before describing offshoring in the USA first, then offshoring in Germany.

2.1 Definition and Terms

In existing literature, there is no single definition of the term offshoring nor one precise delimitation to the term outsourcing. Both terms refer to sourcing decisions in companies.

For example, according to Knolmayer, 2007, pp. 1f, outsourcing is buying services from other companies. Offshoring is defined as a special form of outsourcing, in which the service is bought from a foreign company. On the other hand, Alebrand, 2013, p. 2 defines outsourcing and offshoring as mutually exclusive: outsourcing is the provision of services by external companies, offshoring is the internal execution of tasks in a foreign country.

These contrasting definitions may serve as an example for the lack of distinct terms in this field of research. Nevertheless all the definitions agree that outsourcing pertains to external service provision and offshoring refers to service provision in a foreign country. This Bachelor's thesis will use the following definition of the term offshoring by Andersson, Karpaty, and Savsin, 2016, p. 321:

“Offshoring [is the] disintegration of the firms’ production processes across national borders[...]

This means, offshoring is not only a description for the state of an organization, but also the process to relocate business processes.

The term outsourcing is derived from “Outside Resource Using” (Specht and Lutz, 2007, p. 46). It is acquiring intermediate inputs from external businesses (Specht and Lutz, 2007, p. 46).

Therefore, the terms offshoring and outsourcing do not have a direct relation; both terms are independent and describe different possibilities of entrepreneurial organization. In figure 1, the delimitation between outsourcing and offshoring is clearly shown. A company can choose to offshore, outsource or both; every single possibility has its own term.

Offshoring, in the context of this thesis, means foreign outsourcing and foreign direct investment (FDI), unless otherwise specified.

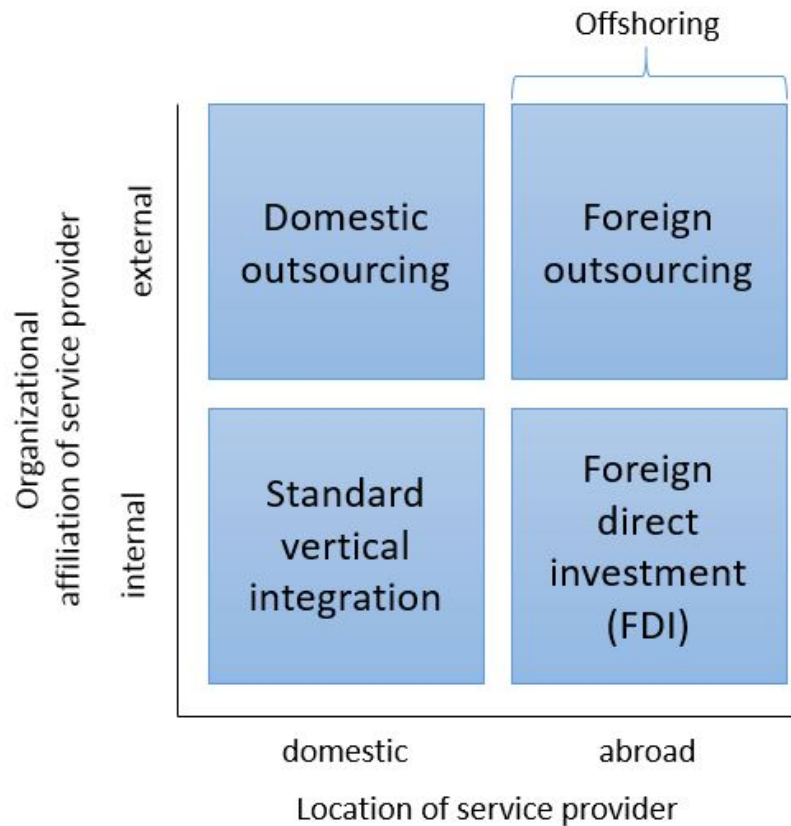


Figure 1: Definition of terms, based on Antràs and Helpman, 2004, pp. 552f

Some publications add a geographical dimension to their definition of offshoring. Jahns, Hartmann, and Bals, 2007 state that there must be shores between the customer and the supplier in order to call the transaction offshoring, otherwise the correct term would be Nearshoring. Cappallo and Da-Cruz, 2006 postulate a need for a relatively high distance ("relativ hohe räumliche Distanz", p. 487) between the partners. Dressler, 2007 defines offshoring only as transaction between partners on different continents. Given the ambiguous and arbitrary nature of the distinction between offshoring and nearshoring, this thesis refrains from using the term nearshoring. All provision of services outside the captive country of a company are called offshoring.

2.2 Factors for the Development of Offshoring

Globalization, and offshoring as part of the development, had its early beginnings in the 1970s and gained traction once the Iron Curtain had fallen in 1989 (Sachs and Warner, 1995, p. 1). This section describes the various factors that enabled the development of offshoring to the point it is today.

Political and Historical Developments After the end of Second World War (WWII), countries belonged to one of three distinct sectors of the world: the capitalist western countries, communist eastern countries or developing countries that sought a way to not get crushed between the two super powers and proclaimed state-led industrialization, a third way between capitalism and communism. (Sachs and Warner, 1995, pp. 12f)

With the majority of world population in countries without market-based economic mechanisms in place and most of the currencies not freely convertible, international trade was basically nonexistent in the post-war world. While western countries systematically restored their trade relations, developing countries were much slower to open their economic systems to international trade. By 1994, most countries had opened their trade policies through removing trade barriers, ensuring the free convertibility of their currencies and disestablishing state monopolies. (Sachs and Warner, 1995, pp. 12-25)

In the last twenty years, global trade relations have only increased. Trade agreements and organizations such as the World Trade Organization (WTO)¹, the North American Free Trade Agreement (NAFTA)² or the European Economic Community (EEC)³ (a predecessor of the European Union) further facilitated global trade and created a stable environment for long-term business agreements across borders.

Information and Communication Technology Innovations in Information and Communication Technology (ICT) have been paramount in enabling offshoring. Beginning with the invention of the first computer in 1941, the rapid development of computing power, data storage and particularly data transmission removed the need for local completion of tasks. The Internet necessitated a quick standardization and modernization of communication systems on a global scale – the prerequisite for offshoring. (Hutzschenreuter, Dresel, and Ressler, 2007, pp. 9f and Jahns, Hartmann, and Bals, 2007, p. 93)

Organizational Factors In order to efficiently offshore tasks or processes, the work has to be well-defined and standardized. In this way, economies of scale can fully be utilized and completion of work can be managed across multiple involved companies or subsidiaries. (Hutzschenreuter, Dresel, and Ressler, 2007, p. 11)

The aforementioned developments in ICT remove the need for local presence of the service provider (Uno-Actu-Principle) for most services. Digitalization enables organizations to detach tasks from specific locations. In a first step, those tasks are centralized and standardized. The second step is often offshoring the tasks. (Hutzschenreuter, Dresel, and Ressler, 2007, pp. 12f)

¹For further information please see the website of WTO, <https://www.wto.org/>, visited on 05. August 2016

²Further information: <https://ustr.gov/trade-agreements/free-trade-agreements/north-american-free-trade-agreement-nafta>, visited on 05. August 2016

³Established 1957 with the Treaty of Rome <http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=URISERV:xy0023>, visited on 05. August 2016

Company size is an important indicator when describing organizational factors. Therefore, in table 1 a delimitation is introduced according to recommendation of European Commission⁴.

Company category	Staff headcount	Turnover
Micro	< 10 and	$\leq \text{€ } 2 \text{ m}$
Small	< 50 and	$\leq \text{€ } 10 \text{ m}$
Medium	< 250 and	$\leq \text{€ } 50 \text{ m}$
Large	≥ 250 and	$> \text{€ } 50 \text{ m}$

Table 1: Definition of company sizes

Macroeconomic and Socio-Demographic Factors ICT developments, organizational and political factors are enablers for offshoring, but the main driver for offshoring decisions in companies are the differences in salaries, taxes, and interest rates between industrialized and developing countries that result in cost arbitrage. In Jahns, Hartmann, and Bals, 2007, p. 89, the example of engineering wages in 2000 is given: while German and American engineers earned \$31 and \$36 per hour, an Indian engineer made only \$6.5⁵ per hour⁶. It is obvious that companies want to use this disparity to their advantage.

In addition to the wage differences, socio-demographic factors such as education, motivation and age distribution in developing countries influence offshoring supply. High social prestige connected to working for large western companies contributes to a higher ratio of academics that apply for offshoring related jobs and motivates employees. Thus, the quality of work is often very good and may be better than in the original country. (Jahns, Hartmann, and Bals, 2007, p. 93)

In the following sections, those factors for both the USA and Germany will be examined. Furthermore, a quantification of offshoring will be attempted in order to provide a basis for the direct comparison of both countries in section 2.5.

2.3 Offshoring in the USA

“The United States is the world’s largest direct investor[...]”
(Kozlow, 2006, p. 3)

⁴EU recommendation 2003/361: <http://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX:32003H0361&from=EN>, visited on 19. August 2016

⁵Figures are given with a decimal point.

⁶The authors refer to United Nations Secretary and Industry Labor Office (2002) as source of these wages, which could not be verified at the time of writing this thesis.

Offshoring originated in the USA and spread from there as a trend around the globe. This section explores the contributing factors from historical, organizational and macroeconomic angles. It is then completed by a quantitative evaluation of offshoring in the USA.

Political and Historical Developments The United States, with its country intact and victorious in WWII, emerged as one of two global super powers in the post-war world. On an economical level, the U.S. quickly confirmed its position as the world's richest country. Between 1940 and 1960, gross national product more than doubled from \$200 bn to \$500 bn. In the same time, large American corporations grew even larger in a wave of mergers, resulting in conglomerates with operations in a variety of industries. In this time, the first companies developed holdings overseas and, in that way, pioneered the development of offshoring. (Winkler, 1994b)

As confrontations between the Soviet bloc and the U.S. slowly escalated to the Cold War in the 1960s, the American government ran unprecedented research and innovation programs. Military-funded inventions such as ARPANET lay the groundwork for the development of the Internet (Leiner et al., 2003), while the race to space culminated in the first man on the moon in 1969. Surrogate wars, most notably Vietnam War, strained the national economy⁷, so that by the start of the 1970, the country was in a deep recession. The Dow Jones Index fell 36 percent between November 1968 and May 1970; in the same time, unemployment rates reached 6.6 %, and by 1973 inflation rose to 9 %. President Carter, elected in 1976, tried to turn the economy around by means of government spending and deregulation. (Winkler, 1994a)

In the 1980s, a trend that had started 50 years ago culminated in three-fourths of all employees working in the service sector. This trend has been facilitated and accelerated by availability and use of computers, a technology the U.S. government had made significant investments in since the 1950s. At the same time, classic industries such as automobile, steel and textile were suffering from increased competition. Combined with falling oil prices in 1982, a sharp recession had more than 10% of the population unemployed. President Reagan reacted with tax cuts and by 1984 the economy had turned around and entered a five-year period of growth. (Winkler, 1994c)

Relations between the superpowers began to normalize in the late 1980s. All over Eastern Europe, people were demonstrating for democratic reforms. In 1989, the Berlin Wall fell. With the end of the Cold War, the world was open once again, open for global trade. (Winkler, 1994c)

To recap, the most important phenomena in recent U.S. history with respect to offshoring are:

- Quick economic recovery after WWII

⁷This section is focused on the economical circumstances that contributed to the development of offshoring. Therefore, social and societal effects of Vietnam War are not included for the sake of a stringent argumentation.

- The expansion of large, multi-industrial corporations
- Government investment in research, yielding the basis for offshoring enabling technology
- The tendency to react with increased spending to economic downturns
- Economic deregulation in the late 1970s
- Growing importance of the service sector

In 1993, U.S. congress approved North American Free Trade Agreement, the first free trade agreement of its kind, after a heated national debate. Labor unions insisted that NAFTA would lead to job losses, environmentalists worried that it would encourage companies to bypass controls on industrial pollution, and government argued, a greater exchange of goods and services would make the three participating countries⁸ more competitive in global markets(Winkler, 1994c). With this, the era of offshoring began.

Organizational Factors When analyzing organizational structure of U.S. economy, there is no way around the United States Census Bureau. Every five years, the authority conducts a Survey of Business Owners and Self-Employed Persons. The most recent installment selected 1.75 million businesses in 2012 asking for information regarding characteristics of the businesses and their owners. Data was then matched to existing information from the Internal Revenue Service and further census data⁹.

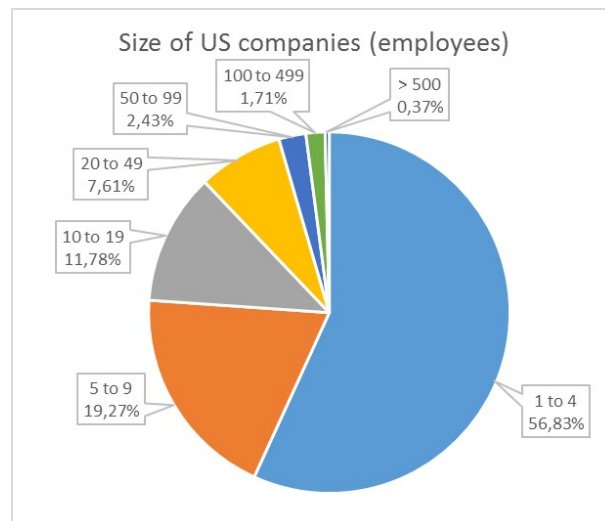


Figure 2: Size of U.S. companies by number of employees¹⁰

⁸USA, Mexico and Canada

⁹For a complete description of census methodology please refer to <http://www.census.gov/programs-surveys/sbo/technical-documentation/methodology/2012-sbo-methodology.html>, visited on 20. August 2016

¹⁰Data source: http://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=SB0_2012_00CSB42&prodType=table, visited on 19. August 2016

In figure 2 the number of companies per size category is plotted on a pie chart. Remarkably, micro companies make up about three-fourths of all companies. Another fifth are small companies. As the U.S. Census Bureau uses a different scale to classify company sizes than presented in table 1, a delimitation between medium and large companies is not possible, but the low number of companies with more than 500 employees (17 724, or 0.33%) is noteworthy.

Before any conclusions are made, a different angle of analysis is added in order to gain a comprehensive view on U.S. economy.

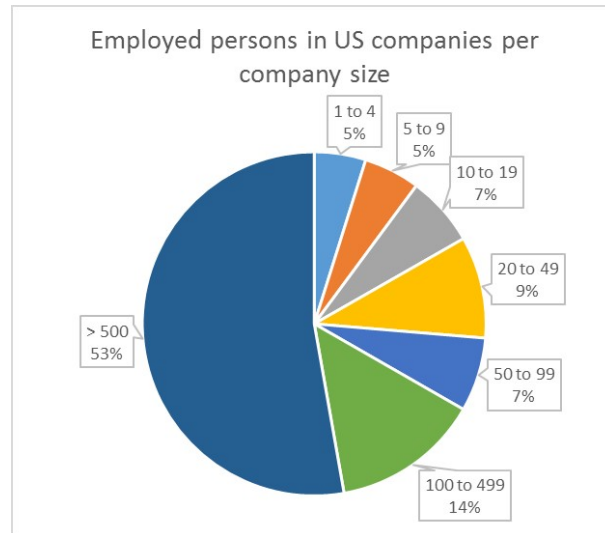


Figure 3: Number of employees per company size in the U.S.¹¹

In figure 3, the number of employees working in companies of each size categories is shown. The outstanding fact is that 53% of the working American population, 60 825 680 persons, are employed at the 17 724 companies with more than 500 employees. On the other hand, micro companies only employ 10% of working population.

This means that large companies have a significant influence on U.S. economy. As mentioned on page 9, in U.S. history there have been several waves of mergers that resulted in large, multi-industry companies (Winkler, 1994b). In consequence, many corporations that dominate global markets today are American (e.g. The Coca Cola Company, Procter & Gamble, General Electric).

Macroeconomic and Socio-demographic Factors The USA spans 9 984 670 square kilometers and five time zones¹². This makes the country the third largest in the world by area. (Central Intelligence Agency, 2016)

Therefore, U.S. citizens are already used to dealing with large distances and different time zones, maybe from working in a company that operates nationwide, maybe because

¹¹Data source: http://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=SB0_2012_00SCB42&prodType=table, visited on 19. August 2016

¹²Considering no overseas territories.

friends or family live in different states. Cross-country relocations are fairly common, and TV air times are always given in the different time zones for the convenience of the viewers. Offshoring profits from this circumstance, because even though the distance to co-workers increases, the communication behaviors needed for collaboration across a distance are already in place.

Offshoring Quantified Offshoring originated in the USA in the early 1990s (Pisani and Ricart, 2016, p. 389). Even earlier, U.S. companies pioneered in foreign investment, e.g. by establishing production sites abroad (Kozlow, 2006, p. 5). Looking at the past 25 years, imports of services and especially imports of ICT services have grown exponentially. In figure 4], import volume for ICT services is shown. Short of a small decline in 2002, which can be explained with the burst of the Dotcom Bubble in the same year, volumes have consistently grown and tripled from \$12 bn in 1999 to \$36 bn in 2015. Since 2010, the growth has slowed down considerably. It remains to be seen if this trend persists or if it is just a small break that will make way to further growth.

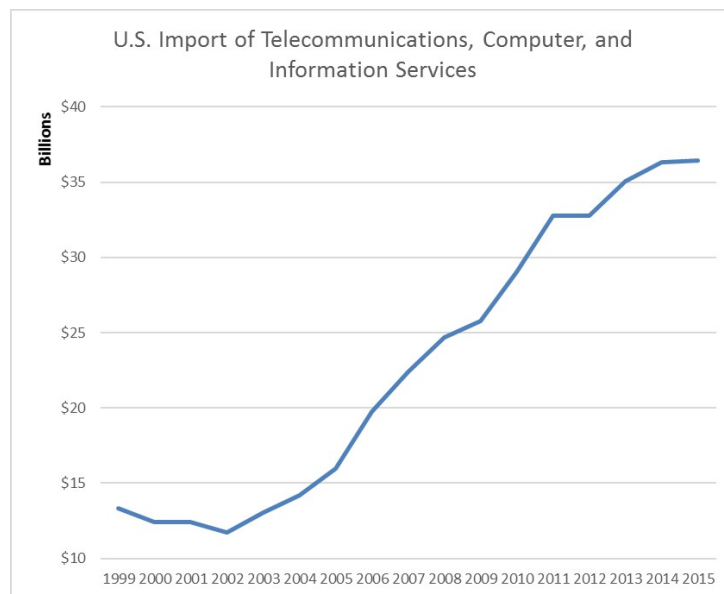


Figure 4: U.S. import of ICT services¹³

A comprehensive look at the prevalence of offshoring in the U.S. can be gained by consulting the Survey of Business Owners and Self-Employed persons. An overview of relevant findings is given in figure 5.

In this graph, for each company size there are several percentages given. First, the percent of firms that size which outsourced or transferred any business function or service to a company outside the U.S. is shown. Predictably, all but the biggest company size with more than 500 employees have a low share of companies that practice foreign outsourcing. However, even of the biggest companies, only 7.1 % have used this method of offshoring in 2012.

¹³Data source: www.bea.gov/newsreleases/international/trade/trad_time_series.xls, visited on 10. August 2016

Additionally, there are the percentages of revenue and number of employees of companies which outsourced outside of the U.S. in 2012 shown. In most size categories, companies have a bigger share of revenue than what would be suggested by their number. This leads to the conclusion that companies that outsource abroad earn more revenue than those who don't.

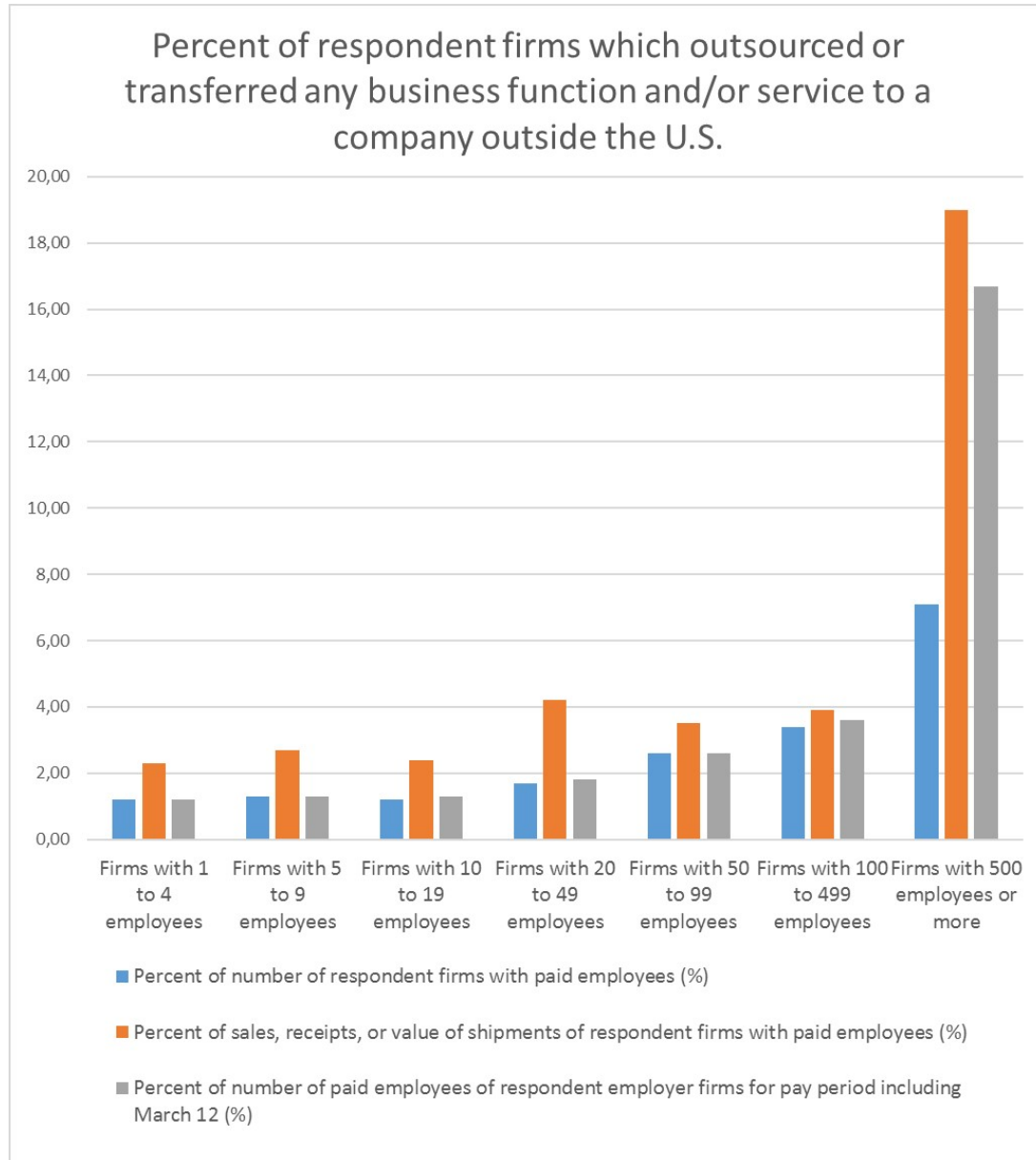


Figure 5: Results of 2012 Survey of Business Owners - U.S. Census Bureau¹⁴

Data regarding foreign direct investments of U.S. companies in context of offshoring is not as readily available; in fact, “[...]no U.S. government agency collects data on U.S. firms in such a way that it is possible to track a plant closing in the United States with a comparable plant opening in a foreign country. As a result, most data on the activity of U.S. firms shifting plants or jobs abroad are anecdotal.” (Jackson, 2013)

¹⁴Data source: http://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=SB0_2012_00SCB42&prodType=table, visited on 19. August 2016

Often, one company may outsource to a different company in the U.S., which in turn could use a subcontractor in a different country. In this scenario, no company has actively shifted jobs abroad, but there is still an impact on the employment market. An estimation by Bureau of Economic Analysis (BEA) of job losses due to offshoring was 195 000 jobs per year from 1999 to 2001, which is only 1.5% of the 13 million jobs that were lost overall per year. (Kozlow, 2006, pp. 14ff)

It is expected that the share of U.S. companies which offshore through FDI is much higher than the 7.1% of large companies that use foreign outsourcing. In Hutzschenreuter, Dresel, and Ressler, 2007, pp. 167ff, a study of 231 American companies is presented. Of those, 60% have implemented offshoring. Considering the small sample size and the fact that only large companies have been invited to participate in the study (Hutzschenreuter, Dresel, and Ressler, 2007, pp. 199f) it can be assumed that this number is much lower. Unfortunately, research did not uncover a more precise estimation.

2.4 Offshoring in Germany

In this section, the main factors determining offshoring ventures of German companies will be explored, starting with a short excursion in recent history, then discussing organizational and macroeconomic and socio-demographic factors. At last, the scale of offshoring in Germany is quantified.

Political and Historical Developments In the aftermath of WWII, German economy was devastated. Vast areas of the country were destroyed by allied bombs, including cities and production plants. The country was divided into four military occupation zones, one of which would become the soviet-influenced German Democratic Republic (GDR) in 1949. (BBC, 2012)

In GDR, the Soviet Union undertook an extensive industrial dismantling, while similar plans had not been executed in the allied occupation zones, which in 1949 formed the Federal Republic of Germany (FRG). Still, reconstruction of West German economy progressed very slowly. Facing the threat of communist ideology spreading in Europe, U.S. Secretary of State Marshall established the “Marshall Plan”, which allowed participating countries to receive U.S. goods and raw materials while paying in their local currency. This was the foundation for a rapid growth of West German economy between 1950 and 1960, the so-called ‘Wirtschaftswunder’. (Kimmel, 2005)

The same time frame saw a deepening of the division of the country. While GDR joined the soviet Warsaw Pact in 1955, West Germany joined the North Atlantic Treaty Organization (NATO) in the same year and the EEC in 1957. This development culminated 1961 in the construction of the Berlin Wall. (BBC, 2012)

From an economic perspective, FRG had quickly become a valued trading partner and important exporter of industrial machine tools, automobiles, and chemical and engineering products to the western hemisphere. In spite of suffering from restrictions of the commu-

nist regime, GDR assumed a similar role in the communist part of the world, exporting machine tools, electronics and chemicals. The 1960s brought first signs of economic slowdown, in part due to the stop of intra-German migration from east to west that had supplied the west with skilled labor until 1961. Under the pressure of consolidation in the late 1960s, the new Grand Coalition in FRG increased regulation of the economy. (Solsten, 1995¹⁵)

By the 1980s, the intra-German diplomatic relationship had normalized to a point where it was possible for West Germans to visit the GDR. Soviet president Mikhail Gorbachev started reforms mid-decade in order to liberalize the Soviet Union and stabilize the economy. Even though these reforms were disapproved of by East German government, the news reached people in the GDR and encouraged opposition. In spite of facing rising repression by the government, opposition groups grew large enough to organize large public demonstrations in 1989. Additionally, many GDR citizens fled the country through neighbor states, particularly Hungary. East German government caved to the pressure and opened the Berlin Wall on 9. November 1989. The following year, West German Chancellor Kohl and the first freely elected GDR government created the legalistic and diplomatic prerequisites for reunification. On 3. October 1990, Germany was reunited. (Solsten, 1995¹⁶)

As the Cold War had ended, the path for even stronger European integration was clear. In 1992, twelve European nations signed the Treaty of Maastricht on European Union¹⁷, creating the European Union and prepared the introduction of a common currency with financial criteria that are to be met by each member in order to adopt the currency. The euro was introduced as an accounting currency in 1999 and in 2002 the original members of the Eurozone replaced their national currencies with euros.

Summing up, the most important historical developments for offshoring in Germany are:

- Strong focus on exports
- *Wirtschaftswunder* in the 1950s
- Government regulation of economy
- Founding member of the EU
- Euro as common currency in the EU

¹⁵This book was accessed online, therefore page numbers can not be given. The cited information is found in chapters “The Economy” and “The Economic Miracle and Beyond”, <http://countrystudies.us/germany/134.htm> and <http://countrystudies.us/germany/137.htm>, visited on 22. August 2016

¹⁶Chapter “History: 1945 to 1990, <http://countrystudies.us/germany/3.htm>, visited on 23. August 2016

¹⁷Further information can be found at EUR-Lex: <http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv:xy0026>

Organizational Factors Germany's economy is largely influenced by small and medium enterprises (SMEs). Many companies have found their niche where they excel and dominate the market. Often, those companies are family-owned, managed by the owner(s) and rooted in their local community. These qualitative characteristics are not useful for statistical analysis, therefore, SMEs are defined by number of employees and revenue as shown in table 1.

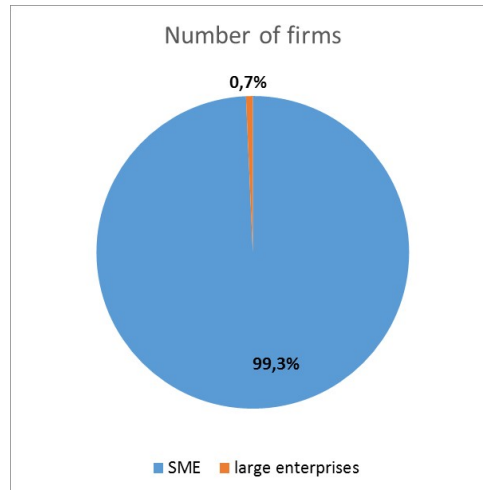


Figure 6: Percentage of SMEs and large companies in Germany, 2011 (Söllner, 2014, p. 42)

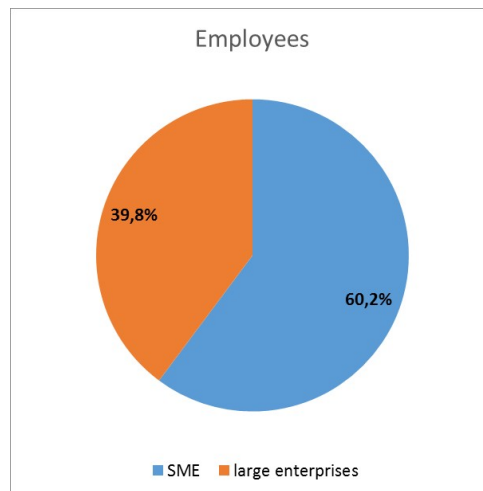


Figure 7: Percentage of employees in SMEs and large companies in Germany, 2011 (Söllner, 2014, p. 42)

In figures 6 and 7, percentages of SMEs, large enterprises and their employees in 2011 are shown. The majority of German working population work in SMEs, so those are often seen as very important for growth and structure of German economy (Söllner, 2014, p. 40). Conversely, large enterprises are just 0.7% of all companies, but they earn 66.5% of revenues (Söllner, 2014, p. 42). Those companies are more likely to engage in offshoring, because economies of scale promise larger cost savings.

Historically, Labor Unions are very strong in Germany. Despite the fact that offshoring often does not have a fundamental impact on employment in the original country, Unions

often oppose offshoring plans and present a major obstacle to German companies who wish to offshore. Lengthy negotiations make it impossible for managers to move quickly and the result often hampers possible cost savings.

Both of those unique factors deter many German companies from offshoring, even though cost pressure has increased over the last two decades.

Macroeconomic and Socio-demographic Factors There are two¹⁸ basic systems of education in Germany. One is pursuing an academic degree, the other is vocational training in combination with adapted school that caters to the respective job description. This system ensures well-trained employees in both academic and non-academic jobs and is unique to Germany and Austria. As a result, employers can assume a certain level of domain knowledge in new employees. This results in shorter training times for new employees. On the other hand, knowledge transfer is often informal and not standardized or documented. Employees tend to hold their position for long times, building specialized knowledge in their working fields.

Germany, being a small and densely-populated country, is very conducive to local collaboration. SMEs especially are very focused on their main location and even in larger companies, employees tend to build location-specific networks. When facing a problem, the first approach to solve it involves finding and speaking to someone who had this problem before. This approach often is very successful, as fluctuation in more senior employees is low and the aforementioned specialized knowledge that is built up over the course of a career at a company. Also, there may be no alternative to relying on co-workers, because this kind of intrinsic knowledge remains often undocumented.

Offshoring Quantified According to Eickelpasch, 2015, p. 70, only 9.3 % of business services have been imported in 2010¹⁹. This may seem like a very low number, even though it is expected that fewer German companies offshore, compared to the USA. However, Eickelpasch only accounts for Foreign Outsourcing as his definition of offshoring does not include FDIs (Eickelpasch, 2015, p. 56). This information is therefore not sufficient to draw any conclusions concerning offshoring in Germany.

Further insights into the prevalence of offshoring in Germany can be found in a survey that has been conducted by German Statistisches Bundesamt in 2008. For this survey, 9361 manufacturing and service companies answered a questionnaire focusing on drivers, scope and results of offshoring on firm-level (Statistisches Bundesamt, 2008, p. 7). Of the polled service companies²⁰, 15.4% had offshored one or multiple corporate functions until 2006, and 10.7% planned to do so in the time span 2007 - 2009. The percentage of

¹⁸In the last two decades, dual degree and vocational training programs have gained traction. Offering both an academic degree and working experience, those programs are very popular and have even been implemented in American subsidiaries of German companies, e.g. Volkswagen.

¹⁹The author cites input-output tables of Statistisches Bundesamt and calculations of DIW Berlin.

²⁰The survey is on shifting business activities abroad, so it includes production abroad. This thesis focuses on offshoring services, so only results of service companies are included.

companies that offshore grows with the number of employees. (Statistisches Bundesamt, 2008, p. 11)

Regarding cooperation partners, the survey found that 81.4% of service companies practiced or planned FDI and only 24.7% chose Foreign Outsourcing, transferring tasks to external partners. Most often, a new subsidiary had been established (47.5%). (Statistisches Bundesamt, 2008, p. 18)

2.5 Significant Differences between Germany and the USA

As shown in the previous sections, there are vast differences between Germany and the USA when it comes to offshoring. However, accurately quantifying those differences is no small effort. Government institutions for measuring trade activities exist in both countries, but there are no international standards regarding the indicators. Furthermore, both economies vary largely in size. The U.S. are the worlds largest economy with a gross domestic product (GDP) of \$17.947 trillion in 2015, while Germany had a GDP of \$3.356 trillion²¹. Therefore one can not simply compare unadjusted offshoring volume. Additionally, currency conversion is to be considered.

Economic Focus As detailed in section 2.4, Germany has been an export-oriented country since the 1950s. In fact, German authorities have registered trade surpluses since 1952 without exception (Statistisches Bundesamt, 2016). In contrast, the U.S. have registered consistent trade deficits in the last 30 years²². This suggests that the U.S. has an import-oriented economy.

This discrepancy, on the first glance, does not imply anything about offshoring. On nearer inspection, though, there are two aspects. First, offshoring, as far as foreign outsourcing is concerned, is part of the foreign trade balance. Second, exporting and importing are two different mindsets that manifest in companies. For an import-oriented company, importing business services suggests itself, whereas for an exporting company this idea is not nearly as obvious.

Maturity of Offshoring

Structure of organizations corporations vs. SMEs

Offshoring Locations and Distances 94% of American Offshoring Destinations: “Farshore”, Germany: 52 Near, 48 Farshore Hutzschenreuter, Dresel, and Ressler, 2007, pp. 175f

²¹Data source: World Bank, <http://data.worldbank.org/indicator/NY.GDP.MKTP.CD?locations=US-DE&start=1990>, visited on 14. August 2016

²²Data source: U.S. Census Bureau, Foreign Trade: <https://www.census.gov/foreign-trade/balance/c0015.html>

Language English is a language that is spoken all over the world. With 400 million native speakers it is one of the largest languages of the world, but as the *lingua franca* of global business and with over 1.5 billion speakers all over the world (Hogg and Denison, 2008, p. 1), companies operating in English have a great advantage when communicating with offshore service providers.

In comparison, German is spoken by about 100 million native speakers and in 2015, had been learned by 15.4 million people around the globe (Auswärtiges Amt, 2015). This severely limits the pool of viable service providers, if German companies require the provision of services in German.

References

- Alebrand, Wolf-Werner (2013). "Offshoring statt Outsourcing". In: *Controlling & Management Review* 57.8, pp. 86–92. ISSN: 2195-8262. DOI: 10.1365/s12176-013-0812-4.
- Andersson, Linda, Patrik Karpaty, and Selen Savsin (2016). "Firm-level effects of offshoring of materials and services on relative labor demand". In: *Review of World Economics* 152.2, pp. 321–350. ISSN: 1610-2878. DOI: 10.1007/s10290-015-0243-8.
- Antràs, Pol and Elhanan Helpman (2004). "Global Sourcing". In: *Journal of Political Economy* 112.3, pp. 552–580.
- Auswärtiges Amt, ed. (2015). *Deutsch als Fremdsprache weltweit: Datenerhebung 2015*. URL: https://www.goethe.de/resources/files/pdf37/Bro_Deutschlernerhebung_final2.pdf (visited on 08/24/2016).
- BBC, ed. (2012). *Timeline: Germany*. URL: http://news.bbc.co.uk/2/hi/europe/country_profiles/1053880.stm (visited on 08/22/2016).
- Cappallo, Stefan and Patrick Da-Cruz (2006). "Offshoring". In: *DBW - Die Betriebswirtschaft* 04, pp. 487–488.
- Central Intelligence Agency, ed. (2016). *The World Factbook: North America: The United States*. URL: <https://www.cia.gov/library/publications/the-world-factbook/geos/us.html> (visited on 08/20/2016).
- Dressler, Sören (2007). *Shared Services, Business Process Outsourcing und Offshoring*. 1. Aufl. s.l.: Gabler Verlag. ISBN: 978-3-8349-0257-3. DOI: 10.1007/978-3-8349-9266-6.
- Eickelpasch, Alexander (2015). "Outsourcing und Offshoring in der deutschen Industrie". In: *Vierteljahrshefte zur Wirtschaftsforschung* 84.1, pp. 55–77. ISSN: 0340-1707. DOI: 10.3790/vjh.84.1.55.
- Grossman, Gene M. and Esteban Rossi-Hansberg (2008). "Trading Tasks: A Simple Theory of Offshoring". In: *American Economic Review* 98.5, pp. 1978–1997. ISSN: 0002-8282. DOI: 10.1257/aer.98.5.1978.
- Helpman, Elhanan (1999). "The Structure of Foreign Trade". In: *Journal of Economic Perspectives* 13.2, pp. 121–144. ISSN: 0895-3309. DOI: 10.1257/jep.13.2.121.
- Hogg, R. and D. Denison (2008). *A History of the English Language*. Cambridge University Press. ISBN: 9781139451291.
- Hutzschenreuter, Thomas, Stephan Dresel, and Wolfgang Ressler (2007). *Offshoring von Zentralbereichen: Von den Erfahrungen deutscher und amerikanischer Unternehmen lernen*. Berlin, Heidelberg: Springer-Verlag Berlin Heidelberg. ISBN: 978-3-540-71934-2.
- Jackson, James K. (2013). "U.S. Direct Investment Abroad: Trends and Current Issues". In: *Congressional Research Service* 7-5700, pp. 1–7. URL: <https://www.fas.org/sgp/crs/misc/RS21118.pdf> (visited on 08/21/2016).
- Jahns, Christopher, Evi Hartmann, and Lydia Bals (2007). "Offshoring: Analyse der Hintergründe und Potenziale". In: *Insourcing, Outsourcing, Offshoring*. Ed. by Dieter Specht. Vol. v.356. Beiträge zur Produktionswirtschaft. s.l.: DUV Deutscher Universitäts-Verlag, pp. 85–106. ISBN: 978-3-8350-0830-4.
- Kimmel, Elke (2005). *Grundzüge des Marshallplans: Eine Einleitung*. Ed. by Bundeszentrale für politische Bildung. URL: <http://www.bpb.de/geschichte/deutsche-geschichte/marshallplan/40034/einleitung> (visited on 08/14/2016).

- Knolmayer, Gerhard F. (2007). "Sourcing-Entscheidungen aus den Perspektiven des Produktions- und Informationsmanagement". In: *Insourcing, Outsourcing, Offshoring*. Ed. by Dieter Specht. Vol. v.356. Beiträge zur Produktionswirtschaft. s.l.: DUV Deutscher Universitäts-Verlag, pp. 1–30. ISBN: 978-3-8350-0830-4.
- Kozlow, Ralph (2006). *Globalization, Offshoring, and Multinational Companies: What Are the Questions, and How Well Are We Doing in Answering Them?* Ed. by Bureau of Economic Analysis. URL: <http://bea.gov/papers/pdf/06AEAMNCpaperFinal.pdf> (visited on 08/11/2016).
- Leiner, Barry M. et al. (2003). *Brief History of the Internet*. URL: <http://www.internetsociety.org/internet/what-internet/history-internet/brief-history-internet> (visited on 08/18/2016).
- Pedersen, Torben et al., eds. (2013). *The Offshoring Challenge: Strategic Design and Innovation for Tomorrow's Organization*. London: Springer. ISBN: 978-1-4471-4907-1. DOI: 10.1007/978-1-4471-4908-8.
- Pisani, Niccolò and Joan Enric Ricart (2016). "Offshoring of Services: A Review of the Literature and Organizing Framework". In: *Management International Review* 56.3, pp. 385–424. ISSN: 0938-8249. DOI: 10.1007/s11575-015-0270-7.
- Rottman, Joseph W. and Mary C. Lacity (2008). "A US Client's learning from outsourcing IT work offshore". In: *Information Systems Frontiers* 10.2, pp. 259–275. ISSN: 1387-3326. DOI: 10.1007/s10796-007-9061-4.
- Sachs, Jeffrey D. and Andrew Warner (1995). "Economic Reform and the Process of Global Integration". In: *Brookings Papers on Economic Activity* 1, pp. 1–118.
- Söllner, René (2014). "Die wirtschaftliche Bedeutung kleiner und mittlerer Unternehmen in Deutschland". In: *Statistisches Bundesamt, Wirtschaft und Statistik*, pp. 40–51. URL: https://www.destatis.de/DE/Publikationen/WirtschaftStatistik/UnternehmenGewerbeanzeigen/BedeutungKleinerMittlererUnternehmen_12014.pdf?__blob=publicationFile (visited on 08/19/2016).
- Solsten, Eric, ed. (1995). *Germany: A Country Study*. Washington: GPO for the Library of Congress. URL: <http://countrystudies.us/germany/> (visited on 08/22/2016).
- Specht, Dieter and Markus Lutz (2007). "Outsourcing und Offshoring als strategische Handlungsalternativen". In: *Insourcing, Outsourcing, Offshoring*. Ed. by Dieter Specht. Vol. v.356. Beiträge zur Produktionswirtschaft. s.l.: DUV Deutscher Universitäts-Verlag, pp. 43–60. ISBN: 978-3-8350-0830-4.
- Statistisches Bundesamt (2008). *Verlagerung wirtschaftlicher Aktivitäten: Ergebnisse der Piloterhebung*. Wiesbaden. URL: https://www.destatis.de/DE/Publikationen/Thematisch/UnternehmenHandwerk/VerlagerungAktivitaeten5529301069004.pdf?__blob=publicationFile (visited on 08/08/2016).
- (2016). *Außenhandel: Gesamtentwicklung im Außenhandel seit 1950: 2015 vorläufig*. Wiesbaden. URL: https://www.destatis.de/DE/ZahlenFakten/GesamtwirtschaftUmwelt/Aussenhandel/Gesamtentwicklung/Tabellen/GesamtentwicklungAussenhandel.pdf?__blob=publicationFile (visited on 08/24/2016).
- Winkler, Alan (1994a). "Decades of Change". In: *An outline of American history*. Ed. by Howard Cincotta. [S.l.]: United States Information Agency. URL: <http://usa.usembassy.de/etexts/history/ch12.htm> (visited on 08/16/2016).
- (1994b). "Postwar America". In: *An outline of American history*. Ed. by Howard Cincotta. [S.l.]: United States Information Agency. URL: <http://usa.usembassy.de/etexts/history/ch11.htm> (visited on 08/16/2016).

Winkler, Alan (1994c). "Toward the 21st Century". In: *An outline of American history*. Ed. by Howard Cincotta. [S.l.]: United States Information Agency. URL: <http://usa.usembassy.de/etexts/history/ch13.htm> (visited on 08/16/2016).