Chris Cannon, Summer 2009
Goethe TOP Lesson: German – US Trade Relations

SUBJECT/GRADE LEVEL

- Intended for High School Economics classes

TIME REQUIRED

- As written the lesson is designed for 3 50-55 minute class periods. Suggested times for each component of the lesson are provided for adapting the lesson to alternative schedules.

LESSON OBJECTIVES

- Students will
  - identify major exports and imports of the two countries.
  - explain how changes in exchange rates affect trade between the two countries.
  - explain the balance of trade in each country, particularly with each other.
  - evaluate the overall effect of trade between Germany and the US

MATERIALS

- See the Appendix section for all necessary graphics, reading passages and graphic organizers.

SUMMARY

This lesson is designed to give students insight into several issues surrounding international trade by looking at a case study of Germany and the United States. The ultimate goal is for students to evaluate whether trade between Germany and the United States is a positive or negative experience. There are several extensions available for the lesson including looking at historical data, comparing to a third country, or looking at more narrow case studies of certain cities like Hamburg.

PROCEDURES

Day 1:

1) (10 minutes) As soon as class starts, ask students to write down as many things as they can think about that relate to Germany. Students should not discuss with anyone, just write down their own thoughts. After several minutes have students get up and conduct a "give one, get one" activity. They are to take their list around and compare with other students. They should share something on their list with another student and get something from their list to make the lists longer.

2) (5-8 minutes) Gather the students back together as a class and conduct a brief discussion about the things on their lists. Explain that over the next few lessons the students will be learning about international trade by looking at trade relations between the United States and Germany.

3) (3-5 minutes) Pass out the performance task (**Appendix 1**) to the students and go over the components. Explain that they will be learning the information they need to complete the task during the lessons.

4) (2-3 minutes) Display a basic outline map of the world and have students identify Germany and the United States. Ask students how Germany's location makes the country ideal for international trade. (Access to water, central Europe, etc.)
5) (10-12 minutes) Pass out the economic summaries of Germany and the United States found in **Appendix 2**. If possible, students may access this information via the CIA World Factbook at this link: https://www.cia.gov/library/publications/the-world-factbook/geos/us.html Ask students to underline or write down 5 important facts about each economy. Call on several students to state their facts and conduct a brief discussion about the current state of each economy. Ask students if they feel Germany and the United States would make good trading partners based on the information they have so far.
6) (8-10 minutes) Finally, briefly discuss the terms imports and exports with the students. Pass out the cards found on **Appendix 3**. Have the students discuss in small groups whether they think the item on the card is primarily a US Import, US Export, German Import, or German Export. Make a big chart on the board similar to the one found in **Appendix 4**, but BLANK! Have the students come to the board and tape their card in the section they feel it should go. Have at least one student record the information and explain that this is where you will begin tomorrow.

Day 2:
1) (5-8 minutes) Begin by re-creating the student-created chart with the US and German imports and exports from Day 1. Have students defend and explain their choices. Show the visual from **Appendix 5** and discuss Germany's major exports. Explain that Germany is primarily an export economy and discuss the pros and cons of this given the current economic situation. This was previewed in the Day 1 reading summary.
2) (3-5 minutes) Have the students finish their own version of the Appendix 4 graphic organizer either by correcting the version on the board or having students visit the CIA World Factbook link from above and finding the primary imports and exports.
3) (12-15 minutes) Explain that since Germany and the US use different currencies, it is necessary to exchange those currencies before trade can take place. OPTIONAL: If possible, use the website www.x-rates.com to show students the current exchange rates and to view pictures of Euro currency. Give students practice converting currency going both ways by demonstrating the equation (price in dollars = price in Euros x exchange rate of Euros to dollars and vice versa). After several practice items, give the students a different exchange rate and have them re-calculate the prices. Conduct a discussion about what has happened. Explain the concept of appreciation and depreciation and discuss what effects this may have on trade between Germany and the United States.
4) (8-10 minutes) Divide the students into small groups and give them the charts from **Appendix 6.** Ask them to compare the numbers of imports and exports between the US and Germany from 2008 and 2009. Ask each group to identify the trends found in the numbers and explain whether they think these are positive or negative and for whom? REMEMBER: An IMPORT for the US is an EXPORT for Germany. After a few minutes, call on the groups to explain their answers. Explain the term balance of trade to the students and what having a negative balance of trade means for a country.
5) (8-10 minutes) Have students read the two articles from **Appendix 7** concerning recent trade developments in each country. Debrief these articles with a discussion of the overall global economic situation.

6) (2-5 minutes) Finally review the performance task with students and explain that tomorrow they will find supporting information in completing their task.

Day 3 (OPTIONAL)

If you have access to a computer lab, day 3 should be spent in the lab allowing students to research for the task. If this is not an option give the students a list of links (if desired, see Appendix 8) and have them research at home.

WRAP-UP

- When students turn in the performance task ask several of them to share their overall viewpoint. To further and deepen the discussion ask questions like: What other countries may have a similar relationship to the US? What countries likely have a different trading relationship with the US? Why do Germany and the United States import/export similar goods? Etc.

NEXT STEPS

- The next step could be to take this lesson and look at trade barriers (or lack of) between the European Union countries and how those trade barriers are affecting international trade and markets in Europe.

APPENDIX 1 – Performance Task

Many developing countries strive for the kind of economic relationship that the United States and Germany share. A civic group in one of these countries has hired you to put together a report to better explain the economic relationship between Germany and the United States. Specifically, they want you to:

- **explain the role of imports and exports in trade**
- **analyze the balance of trade in each country**
- **evaluate the overall effects of trade between Germany and the United States**

You will be "paid" according to the quality and merit of your report. Because of that, the group has provided you with the following rubric to show you how you will be evaluated.

Criteria	Does Not Meet 1pt	Meets Standard 2pts	Exceeds Standard 3pts
Explains major imports and exports of the United States and Germany	• Lists 1 export or import from the countries OR only gives examples from one country	• Identifies several major exports and imports from both countries	• In addition to meets, also states how having different imports and exports leads to a need to trade
Analyzes the balance of trade in Germany and the United States	• Describes balance of trade in vague terms • States the current balance of trade numbers	• Explains what balance of trade means using the terms imports and exports • Gives BoT numbers for US and Germany WITH EACH OTHER • Explains why each country has a positive or negative balance	• In addition to meets, also explains why having a positive or negative trade balance matters
Evaluates the overall effects of trade between Germany and the United States	• Makes a value judgment with no supporting information	• Explains opinion on whether the balance of trade is positive or negative for each country • Uses current data or economic theory to support reasoning	• Explains potentially positive AND negative effects for Germany and the US with supporting economic data or economic reasoning

Appendix 2 – Basic Economic Summaries

Germany

The German economy - the fifth largest economy in the world in PPP terms and Europe's largest - began to contract in the second quarter of 2008 as the strong euro, high oil prices, tighter credit markets, and slowing growth abroad took their toll on Germany's export-dependent economy. At 1.3% in 2008, GDP growth is expected to be negative in 2009. Recent stimulus and lender relief efforts will make demands on Germany's federal budget and undercut plans to balance its budget by 2011. The reforms launched by the former government of Chancellor Gerhard SCHOEDER, deemed necessary due to chronically high unemployment and low average growth, led to strong growth in 2007, while unemployment in 2008 fell below 8%, a new post-reunification low. Germany's aging population, combined with high chronic unemployment, has pushed social security outlays to a level exceeding contributions, but higher government revenues from the cyclical upturn in 2006-07 and a 3% rise in the value-added tax cut Germany's budget deficit to within the EU's 3% debt limit in 2007. The current government of Chancellor Angela MERKEL has initiated other reform measures, such as a gradual increase in the mandatory retirement age from 65 to 67 and measures to increase female participation in the labor market. The modernization and integration of the eastern German economy - where unemployment still exceeds 30% in some municipalities - continues to be a costly long-term process, with annual transfers from west to east amounting to roughly $80 billion. While corporate restructuring and growing capital markets have set strong foundations to help Germany meet the longer-term challenges of European economic integration and globalization, Germany's export-oriented economy has proved a disadvantage in the context of weak global demand.

United States

The US has the largest and most technologically powerful economy in the world, with a per capita GDP of $48,000. In this market-oriented economy, private individuals and business firms make most of the decisions, and the federal and state governments buy needed goods and services predominantly in the private marketplace. US business firms enjoy greater flexibility than their counterparts in Western Europe and Japan in decisions to expand capital plant, to lay off surplus workers, and to develop new products. US firms are at or near the forefront in technological advances, especially in computers and in medical, aerospace, and military equipment; their advantage has narrowed since the end of World War II. The onrush of technology largely explains the gradual development of a "two-tier labor market" in which those at the bottom lack the education and the professional/technical skills of those at the top and, more and more, fail to get comparable pay raises, health insurance coverage, and other benefits. Since 1975, practically all the gains in household income have gone to the top 20% of households. The war in March-April 2003 between a US-led coalition and Iraq, and the subsequent occupation of Iraq, required major shifts in national resources to the military. Soaring oil prices between 2005 and the first half of 2008 threatened inflation and unemployment, as higher gasoline prices ate into consumers' budgets. Imported oil accounts for about two-thirds of US consumption. Long-term problems include inadequate investment in economic infrastructure, rapidly rising medical and pension costs of an aging population, sizable trade and budget deficits, and stagnation of family income in the lower economic groups. The merchandise trade deficit reached a record $847 billion in 2007, but declined to $810 billion in 2008, as a depreciating exchange rate for the dollar against most major currencies discouraged US imports and made US exports more competitive abroad. The global economic downturn, the sub-prime mortgage crisis, investment bank failures, falling home prices, and tight credit pushed the United States into a recession by mid-2008. To help stabilize financial markets, the US Congress established a $700 billion Troubled Asset Relief Program (TARP) in October 2008. The government used some of these funds to purchase equity in US banks and other industrial corporations. In January 2009 the US Congress passed and President Barack OBAMA signed a bill providing an additional $787 billion fiscal stimulus - two-thirds on additional spending and one-third on tax cuts - to create jobs and to help the economy recover.

Appendix 3 – Cards for Student Activity identifying Exports and Imports

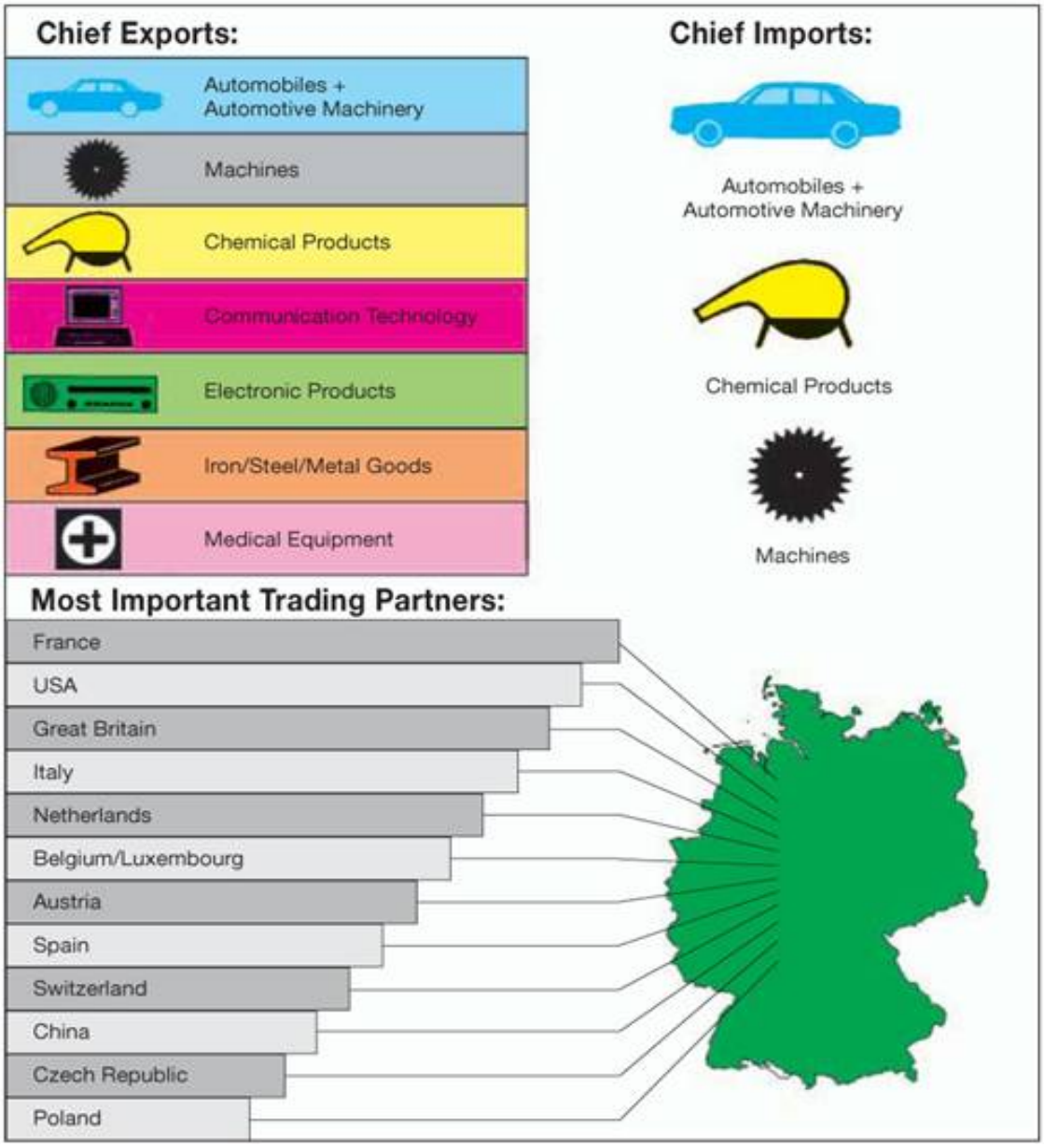
MACHINERY	AIRCRAFT	VEHICLES
CHEMICALS	DATA PROCESSING EQUIPMENT	MOTOR VEHICLE PARTS
TELECOMMUNICATION EQUIPMENT	HEAVY ELECTRICAL EQUIPMENT	SEMI-CONDUCTORS

Appendix 4 – Graphic Organizer for Export Import Activity (Should be blank for students)

German Exports to US	**US Exports to Germany**
Motor Vehicles *Machinery* *Chemicals* *Heavy Electrical Equipment*	*Aircraft* *Telecommunications Equipment* *Data Processing Equipment* *Semiconductors* *Motor Vehicle Parts*

Appendix 5 – Overhead from Goethe Institute Materials: Germany Today

International Commerce **Transparency 8**



Appendix - 6 Trade balance with Germany January-July 08-09 Comparison

Month	**Exports**	**Imports**	**Balance**
January 2009	3,553.0	5,217.7	-1,664.7
February 2009	3,798.1	5,672.4	-1,874.3
March 2009	3,770.7	5,943.0	-2,172.3
April 2009	3,219.0	5,442.7	-2,223.7
May 2009	3,658.0	4,944.5	-1,286.5
June 2009	3,182.2	5,482.4	-2,300.2

Month	**Exports**	**Imports**	**Balance**
January 2008	4,064.5	7,078.5	-3,014.1
February 2008	4,631.0	7,978.7	-3,347.7
March 2008	4,630.2	9,157.4	-4,527.2
April 2008	4,760.7	9,217.1	-4,456.4
May 2008	4,804.5	8,403.0	-3,598.5
June 2008	4,960.0	8,959.1	-3,999.1

Appendix 7 – Article about recent German exports

German export surge ignites hope

German exports rose 7% in June, the fastest pace in nearly three years, in the latest sign of recovery in Europe's biggest economy, official figures show.

Exports totaled 67.4bn Euros (£57.8bn; $96.8bn), which, with imports at 56.4bn Euros, brought the country's trade surplus to 11bn Euros.

These figures are the latest positive signal from the export-focused economy.

At the same time, France reported that its trade deficit widened to 4bn Euros in June, from 3.137bn Euros in May.

For its part, the Organisation for Economic Co-operation and Development said that there were strong signals of improvement in the economic outlook of OECD economies.

Hope springs

The German economy contracted by 3.8% in the first quarter as exports plunged.

The rise in exports renews hopes of recovery and follows comments on Thursday by Karl-Theodor Guttenberg, the economy minister, that the economy held steady in the second quarter.

Analysts welcomed the data. "That's a strong signal from exports after the disappointments we've seen previously," said Juergen Michels at Citigroup. "This means the German economy likely stabilised in the second quarter."

Other voiced cautious optimism.

"I fear this is a one-off effect," said Ulrike Kastens at Sal Oppenheimer. "The intensity of the recession is fading; the worst is behind us in the first quarter. But things remain very bumpy and uncertain."

Story from BBC NEWS:
http://news.bbc.co.uk/go/pr/fr/-/2/hi/business/8189173.stm

Published: 2009/08/07 10:31:48 GMT

U.S. Trade Gap Widens Less Than Forecast

Published: 8/12/2009 9:39:06 AM By: TradingEconomics.com, Bloomberg

The U.S. trade deficit widened less than forecast in June, reflecting a second consecutive gain in exports spurred by a pick-up in economies throughout the world.

The gap increased 4 percent to $27 billion from $26 billion in May, which was the lowest level in almost a decade, Commerce Department figures showed. Exports gained 2 percent, helped by stronger demand for goods such as semiconductors and aircraft engines, while imports rose 2.3 percent, led by a higher cost for oil.

Increases in both exports and imports signals that the worst global slump in the post-World War II era is coming to an end, helping the U.S. pull out of the recession. Federal Reserve policy makers, wrapping up a two-day meeting today, are expected to commit to keeping rates low to secure an economic recovery.

A cheaper dollar may also help boost U.S. shipments abroad; it this month hit its lowest level since October compared with currencies of major American trading partners, a Fed index shows.

Exports climbed to $125.8 billion from $123.4 billion in May. Sales of chemicals, fuel oil and foods, in addition to capital equipment, climbed.

Imports increased to $152.8 billion from $149.3 billion the prior month. The price of imported crude oil jumped to $59.17 a barrel, the highest level since November, from $51.21. Americans also bought more foreign-made automobiles and parts and computers. Demand for consumer goods, such as toys, televisions and clothing, slumped.

The gain in auto imports was probably even bigger in July when plants reopened and the federal “cash-for-clunkers” program got under way, said Englund. Car sales last month climbed to the highest level since September.

After eliminating the influence of prices, which are the numbers used to calculate gross domestic product, the trade deficit shrank to $35.9 billion, the smallest since December 1999.

The shrinking of the trade shortfall in the first half of the year helped limit the severity of the worst recession since the 1930s. Economists surveyed by Bloomberg this month forecast the economy will grow at a 2.1 percent pace in the second half of 2009.

Exports are likely to keep expanding as the global recession eases. China may grow 7.5 percent this year, the International Monetary Fund said July 8 in its latest forecast. Demand for American-made goods increased in Mexico, the European Union, Canada and China.

Appendix 8 – Links to background information and data sources

Economic relations: (Taken from the German Foreign Affairs office website below)
http://www.auswaertiges-amt.de/diplo/en/Laenderinformationen/01-Laender/UsaVereinigteStaaten.html#t2

There are few problems in German-US economic relations. The Transatlantic Economic Partnership between the USA and the EU, which was launched in 2007 on Germany's initiative, opens up additional opportunities. The US is Germany's principal trading partner outside the EU and Germany is the US's most important trading partner in Europe. 2007 saw once again an increase in the volume of bilateral trade in goods (on a dollar basis). German exports to the US grew by 5.9% and German imports from the US by as much as 20.2% compared with 2006. This trend is due in part to the favorable effect of the dollar/euro exchange rate on US exports.

	2003	2004	2005	2006	2007
German exports to US (USD billion)	68.1	77.2	84.8	89.1	94.4
German imports from US (USD billion)	28.8	31.4	34.1	41.3	49.7

(Figures from the US Department of Commerce, Bureau of Economic Analysis)

The two countries are important to each other as locations for investment: the US is the main investment destination for German companies and the second-largest foreign investor in Germany, after the Netherlands. According to the latest figures available from the German Federal Bank, American direct investment in Germany was worth approx. EUR 74 billion at the end of 2005, a slight decrease compared with the previous year (approx. EUR 86 billion). On the other hand, German direct investment in the US amounted to around EUR 155 billion at the end of 2005, a marked increase over the previous year (approx. EUR 135 billion). According to figures issued by the US Bureau of Economic Analysis, in 2005 Germany ranked third among foreign direct investors in the US, after the United Kingdom and Japan. By contrast, Germany ranks only sixth as a destination for American direct investment, after the United Kingdom, Canada, the Netherlands, Australia and Bermuda.

	2002 (EUR billion)	2003 (EUR billion)	2004 (EUR billion)	2005 (EUR billion)
German direct investment in US	159	140	135	155
US direct investment in Germany	75	80	86	74

(Figures from the German Federal Bank)

The German-US Chamber of Commerce: http://www.ahk-usa.com/en/ahk-usa/

German Missions in the US: http://www.germany.info/Vertretung/usa/en/Startseite.html

Website on doing business with Germany:
http://www.germany.info/Vertretung/usa/en/07__Economy/01__Bus__w__Germany/__Business.html

CIA World Factbook Germany: https://www.cia.gov/library/publications/the-world-factbook/geos/gm.html

CIA World Factbook US: https://www.cia.gov/library/publications/the-world-factbook/geos/us.html