

## Three Fair Winds in European Sails

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### Abstract

Addressing the conference themes, this paper contributes to rethinking on Economic Growth and solidarity in Europe. Rethinking requires facts so that a distinction may be made between the culture of Euro-pessimists, who see the European Union falling apart, and Euro-realists, optimists who base their positive assessments on facts. The facts are clear. The sure foundations for economic growth are in place, the product of investment is in place and the prospects for economic growth are assured. First contribution to future economic growth is European leadership in the Energy efficiency field. Remarkable foundations for cheaper energy, a rapidly expanding set of renewable energy resources and the prospects for European energy independence are described. A second contribution comes from the changing nature of politics in the European Union. Solidarity or the populism movement are shown morphing into a centrist movement of main stream parties as elections in the Netherlands and France have demonstrated. The need for socio-economic adjustment is recognized and underway. A third contribution is the hard earned case being made for the Euro. There is the recognition that that the Euro, an idea once ahead of its time, has caught up with the growth and gradual changes which have been taking place in Europe and which are impacting the quality of life for everyone in the European Union. Based on the facts considered, the prospects for the European Union are positive and prosperous. These are three of the “Fair winds in European Sails.”

**Keywords:** Recent economic theory, renewable energy, energy efficiency, fair trade, strong Euro.

*“We can’t direct the winds, but we can adjust the sails”*

(Monson, 2012)

## **Introduction**

The Wall Street Journal is right to recognize that “the Economic Winds are at Europe’s Back” (Sharma, 2017). The pace of economic recovery, albeit “disappointing” until now, “is continuing” (Economist, 2016) and “investors have overlooked Europe’s brightening prospects” (Hildebrand, 2017). Euro-pessimists are readers of Forbes and other magazines that see “the EU’s prospects are bleak” (Lehmann, 2016). Residents of Europe however, are continually more optimistic (Eurobarometer, 2017), they know that Europe includes 6 of “the 10 most competitive economies in the world” (Comen et al, 2015). The Post Second World War, European revival in the industrial and information ages has been supported by global trends which are “richer with opportunity than ever before” (Global Trends, 2017).

Three particular trends in the developing European Economy are causes for optimism. First, “we are witnessing a transformation of global power markets led by renewables” (IEA, 2016). Europe is leading this transformation (EC, 2017). The benefits in terms of low cost even free Internet and communications as a human right (Brookings, 2016), cannot be underestimated. Second, the nature of international institutions in Europe is maturing into a “multi-perspectival society” (Thomas et al, 2011). There is wide recognition that the growth achieved by the European Union has not been proportionately distributed, that neoliberalism “is dead” (Hanson, 2016). In practice, Globalization has proved to be “a boon to the members of the global elite” (Pearlstein, 2011) and protection from the idea of competitive advantage. Dani Rodrik in his book “The Globalization Paradox” (2011) clearly explains how traditional economic theory has become a myth in the global market place. Third, while the value of the Euro may not be obvious to the desk bound observer, commentator, or economist, the benefits of the common currency are immediately obvious to anyone travelling abroad or shopping on line” (Europa, 2017). Clearly the Euro “offers many advantages and benefits” (Johnsen, 2015). These then are the three fair winds in the sails of Europe that will produce “beneficial reforms” that “ultimately transform the bloc into a more effective entity” (Archick, 2017).

## **Literature Review**

Recently the traditional theory on the absolute and comparative advantages of international trade, found in every undergraduate text on Economics (Mankiw, 2014; Samuelson and Nordhaus, 2009; etc.) and one of the essential aims of the World Trade Organization (WTO, 2017) has been proved to be “out of date and effectively dead” (Poweronomics, 2017). There is an increasing realization that a distinction must be made “between traditional theory and recent theory” (Soren Kjeldsen-Kragh, 2001). The global market place provides a bureaucracy of barriers to the idea of free trade. Rules and regulations established by multilateral trade agreements have built huge legal barriers. They protect the elite corporate organizations from competition especially when the market for goods and services changes.

The European Union is one of several multi-national organizations which have demonstrated that transnational trade agreements have led to significant economic growth. The European Union GDP Annual Growth Rates from 1996 – 2017 (Trading Economics, 2017) confirm such a pattern of sustained economic growth. However, while the overall GDP growth rate has been positive, more detailed analysis for the World Economic Forum reveals significant variations of growth within the European Union membership (Myers, 2016). The Gini, which measures income inequality, confirms a growing gap between rich and poor within the European Union (Eurostat, 2017). Data also confirms that Overall European Union wage growth (2009-2017) was 1.7 per cent during a period when inflation was 1.8% (Trading Economics, 2017), indicating that the benefits of growth were going to those who held “capital” rather than fairly to all those whose work was generating the economic growth. The data was further confirmed by Deloitte when preparing their 2017 Mid-year Economic Webinar.

Recently celebrated United States economists noted that increased trade with China “caused severe and permanent harm to many American workers” (Autor, Dorn, and Hanson, 2016). The debate between the left-leaning economists who theorize “negative” effects of free trade and more conservative economists who theorize “positive” are now challenged. Economists ought no longer to consider the case for free trade “on theory alone.” Now the time has come to build their arguments “on a foundation of evidence” (Denning, 2016).

The evidence suggests that one of the features with multinational trade agreements is that the negotiating teams for the agreements are largely made up of the industries' most experienced leaders (seen as an elite) who tend to look for the trade agreements to provide

- Appropriate “present day” regulation (even restriction) for the purposes of contractual recognition of the trading items – thus regulation may limit “new technological” entrance into the trade agreement markets
- A strategic context which is inevitably seen from the point of view of the industry elites since they are the inevitable products of the limited people available for selection – this confirmed by the data above.
- A (perhaps inevitable) “present-day” rather than a “new technology” (or future) strategic perspective leading to rules and regulations that fail to keep up with (or even recognize) developing technology and discovery.
- A narrow traditional view of “Free” trade, when present marketplace evidence points to a demand for focus on “Fair” trade (Hainmueller, Hiscox, and Sequeira, 2014), this impacting the supply chain for the industry.

### **Purpose of this Paper**

This paper recognizes the preference for facts before fiction, for reality when studying market activity, and for serious reflection on the future prospects for Europe. The paper is therefore written in the context of current market practice in international Trade. Three significant opportunities are considered. Together they clearly show that while the pessimists in Europe expect a break-up (Oliveira, 2015), it is the realists who “will adjust the sails” (Ward, 2009) and provide for the three fair winds to be adjusted to blow “at Europe’s Back” (Sharma, 2017). This paper projects three particular strengths, three fair winds, that will be found to impact the future for Europeans:

- Energy Efficiency
- Rethinking European Union
- Growing Strength of the Euro

### **Fair Wind: Energy Efficiency**

Energy consumption in the European Union is falling (Eurostat, 2017). The reduction reflects “efforts taken by member states ... to cut energy use and improve efficiency” (Harvey, 2015). Part of the reduction can be attributed to the focus on low-cost clean solar power currently led by the UK “with the biggest market ahead of

traditional solar powerhouses Germany and France” (Shankleman, 2015). Europe’s solar power sector is also “on the growth path” and this is an area where the European Union policymakers have an opportunity “to contribute to achieving climate goals” (Gupta, 2016) and to provide “a secure political framework for the generation of self-consumption and the storage of solar energy.” An energy revolution is taking place recognizing “the fast increase of renewable power production” (EUREL, 2013). Europe, already in the vanguard of energy efficiency, is a leading player in the renewable energy revolution and “rapid, affordable energy transformation is, in fact, within our grasp” (McCauley, 2016).

Prospects for continuing energy efficiency in Europe may be expected from many revolutionary energy generation programs that are already in process. Leading the way is ITER (Latin for “the Way”) an international collaborative project to capture the potential of nuclear fusion as an energy source (European Commission, 2016). The ITER project, located in Cadarache, in the South of France, is expected to lead to the provision of “virtually limitless energy” (ITER, 2017). Tokamaks are “toroidal devices for producing controlled nuclear fusion that involves the confining and heating of gaseous plasma.” The cost of constructing a conventional Tokamak required financial commitment from the 35-nation collaborative program. Yet, in the last decade private enterprise has discovered potential for spherical tokamaks as possibly, a faster way to fusion (Kingham, 2017). Clearly the potential for economic growth in Europe depends on energy and clearly fair winds are behind Fusion (Offenberger, 2013).

Europe’s leadership in renewable energy generation is not limited to the Fusion projects. Proactive research continues seeking to maximize solar, wave and tidal energy resources. Today’s solar (mostly crystalline silicon photovoltaics) technologies will “likely scale up to multiple terawatts of capacity by 2030” and that without likely technological advances (Jean, 2015). These advances include a fundamental transformation of revenue generation and conversion from the old analog system to a fully digital network in the energy sector. Solar power in Europe “has a huge amount to gain from this” (Stojanovik, 2017).

The “high power density” of wave energy suggests that wave energy “has the capacity to become the lowest cost renewable energy source” and “there is a growing feeling that wave technology can be successful (Martin, 2009). The World Energy Council has estimated that double the current world electricity production may be produced by wave power (ThinkGlobalGreen, 2017). The Economist (2008) reported that power buoys are being tested off the coast of Scotland by AWS Ocean Energy and Iberdrola off the coast of Spain. Aquamarine, another Scottish firm, is testing their

Oyster wave-power device off the Orkney coast. The Scottish subsidiary of Voith Siemens Hydro has also successfully tested a limpet device. Forbes Magazine (Ferris, 2012) noted that the United States are racing “to catch up to Europe in Wave Energy.”

“A huge jump in turbines in German waters” contributed to record-setting energy generation from wind power in Europe in 2015 (Carrington, 2015). Already the ten biggest wind farms have the capacity to generate 6.9 Terra watt hours “equivalent to the consumption of 1,804,744 average European home” (EWEA, 2013).

Added to the revolution in the exploitation of renewable resource energy resources are technological moves to improve the transfer of power generated, this is known as “cogeneration.” Cogeneration “optimizes the energy supply to all types of consumers” promoting significant cost savings by minimizing the power loss that comes when, after power is generated at source, it must be transferred to the user location (COGEN, 2017). Europe’s proactive approach to energy efficiency is also seen in the ways renewable energy research sharing is being facilitated like the renewable energy transparency platform (European Commission, 2017).

Taken together the prospects for energy efficiency in Europe provide the first of the three fair winds that promise Europe’s future prosperity.

### **Fair Wind: Rethinking European Union**

There are significant differences between the structure of the United States of America and the European Union. Indeed “lawyers would say that the European Union and the United States of America are completely different” (Henning, 2010). Many of these differences derive from the founding philosophies and that may be seen in the structure of many of the socio-economic practices which began these modern nations. The United States Constitution, in only seven articles, identifies the powers of the central government and those denied to it “as few, brief, and well defined” (Niskanen, 2003). The European Union, in contrast, has no constitution. The Constitution proposed in 2004 comprised 448 articles, was divided into four parts and has yet to be ratified. Problems identified include the length of the proposed constitution, the perception that the process was not democratic and the failure to incorporate the public into the decision-making process (Toops, 2010).

The inevitable impact is that “for all the buzzwords” like “efficiency and coherence that emanate from Brussels” there is significant overlap between the 33 Directorate-Generals of the European Commission (Docip, 2017) which provide reasons “for this bureaucratic mess” (Weisbrode and Hofman, 2009). Further the European

bureaucracy is seen to founder in a “taxpayer-fluffed feather bed” while the poor people of Europe “suffer the contempt of Brussels” (Batchelor, 2015). While the United States Constitution enjoys a uniform code of commercial and criminal law, a unified language, and a single currency, the European Union is moving stealthily in that direction as revolutions in technology (and especially the supply of energy) provide increasing support for improvement in the quality of life which a growing number of Europeans enjoy. While across Europe people may not trust the bureaucracy, they “continue to get the greatest satisfaction from their family life and personal relationships” (Eurofound, 2016).

This brings us to the nature of ‘solidarity’ in Europe. Real Solidarity comes with a movement that projects the charisma of shared selfishness. Far from ideological unity, the ‘solidarity,’ the populism, in Europe is the product of socio-economic disarray. There is a wave of recognition that “capital” remains “in the hands of individuals. For the few, a perceived oligopoly, an elite, as already noted, statistical analysis confirms theirs’ is the greater portion of the growth in international trade. For the many, those Europeans whose work makes the fortunes of the few, they are increasingly sensitive to the limited improvement in their lot. The good news, confirmed by the recent elections in the Netherlands is that the mainstream parties, responsive to the demand for change, “are already voicing arguments once heard only on the extremes” (Economist, 2017). So here too we see the sails in Europe being reset.

### **Fair Wind: The Euro**

Then the big story this March is that “Europe’s economy is no longer spluttering” (Sharma, 2017). The World’s Elites recognized that “the economic crisis is over” (Coy, 2017). In Europe “the financial crisis is done, finished” (Coy, 2013). From the elite economists, the conventional viewpoint was that the Euro was “a bad idea” (Mankiw, 2015: Feldstein, 2012: Stiglitz et al, 2016, Worstall, 2016). Like Continental Drift (Wegener, 1929) the Euro may well have been “an idea before its time.” The financial elite were constrained by their “deeply old-Keynesian” view (Cochrane, 2015). After all, if you repeat the same story it becomes familiar and familiarity “is the key to fostering belief” (Schwarz, 2007).

More recognition is needed of the elite’s misunderstanding of yesterday’s economic theory, the neo-liberal irony of a “liberal” reform ideal that failed to understand the tenets of laissez-faire. “Like communism, neoliberalism is the God that failed” (Monbiot, 2016). Elite ideas of free trade theory may have facilitated growth but fail to realize that the rules and regulations for multi-lateral trade treaties included protectionist barriers that limited the sharing of the benefits within the “free” trade

areas. Too much regulation choked shared economic growth and now there is recognition of increasing prospects for “fair” trade.

The idea of “fair trade” follows the philosophy of international projects by Starbucks with the production of “fair trade” coffee and Cadburys with “fair trade” chocolate. These projects offering examples for the bureaucrats in Brussels to study so they too can provide better conditions for European workers marginalized by free trade. After all workers in Europe, burdened by the European workplace, environmental and other legal protective rules and regulations, can hardly be expected to compete on an even playing field with workers whose employers are not required to pay for such workplace, environmental and legal overheads. The workplace playing fields need to be levelled. Future trade treaties need to recognize the fact that the workplace, environmental and legal overheads have proved to be protectionist for the International companies who compete in the European market. When appropriate equivalent cost tariffs are imposed, it is likely that many European workers will cease to be marginalized. So, developing trade negotiations needs to take much more notice of a modern ‘fair-trade’ and not yesterday’s ‘free’ trade approach to trade negotiation. Europe’s elite trade negotiators will “provide support to deepen social and environmental sustainability” (Fairtrade, 2017). This in turn will strengthen the balance of trade and therefore the Euro.

Recently the prospects for the Euro have been seen internationally to have improved. The Euro / US dollar exchange rate has been rising steadily “on an improved outlook” and foreign exchange strategists “have conceded they might previously have been a little negative on the Euro’s prospects” (Howes and Monfort, 2017). Writing in the ChicagoBooth Review John Cochrane (2015) was already writing of the negative views of “deeply old-Keynesian” economists and explaining “Why the Euro is a good idea after all” (and this makes a good read for Euro supporters). Reuters (2017) reports that Euro zone factories start 2017 “with the fastest growth in nearly 6 years” and notes that “optimism about the year ahead has risen to the highest since the region’s debt crisis.” Bloomberg too also reports on the “robust pace” of the euro-area’s economic expansion, notes “an upturn in hiring” and concludes that the Euro “starts 2017 on a strong note” (Randow, 2015). So, breezes are blowing strong in the Euro’s sails.

## **Conclusion**

The purpose of this paper was to identify facts that distinguish between pessimists who see the European Union falling apart and realists who have good reason to take a more positive view. The paper has focused on three significant areas ‘three fair winds



in European sails, where the facts clearly establish the growing strength of the European Union and the bright future to which we Europeans may look forward.

The first fair wind identified is leadership in the Energy efficiency field and the remarkable prospects for cheaper energy, rapidly expanding renewable energy resources and the likely achievement of energy independence. Europe has already seen social benefits which are not identified when growth is measured by the raw measure of Gross Domestic Product. Benefits flow from the Internet, from advances in medicine, from technology, and now the prospects of abundant inexpensive energy provide for further improvement in our socio-economic life.

The second fair wind we have noted is the changing nature of the politics in the European Union. The nature of the 'solidarity' or populism movements and the recognition of previously considered extremist ideas as centrist, and their adoption by the main stream parties with elections in the Netherlands and France recognizing the need for socio-economic adjustments.

The third fair wind we have examined is the case for the Euro. We recognize that the Euro was perhaps an idea ahead of its time. Post market has kept pace with the growth and gradual changes which have been taking place and which are impacting the quality of life in the European Union. As we note the Euro is the only currency known to 30 per cent of the population of Europe and therefore firmly established as part of the culture of Europe.

Addressing the conference themes this paper contributes to rethinking on Economic Growth and solidarity in Europe. We note the trends and expectations and, perhaps more important, the rethinking of economic theory. In conclusion, based on the facts considered, the certain prospects for the European Union are positive and prosperous. 'Three fair winds' have been identified and, with some adjustment of the European rudder these three fair winds will blow peace and prosperity into European Sails.

## References

- Ahmed, S. (2009). Fast Internet access becomes a legal right in Finland. CNN website retrieved from <http://www.cnn.com/2009/TECH/10/15/finland.internet.rights/index.html>
- Archick, K. (2017). The European Union: Current Challenges and Future Prospects, United States Congressional Research Service available at <https://fas.org/sgp/crs/row/R44249.pdf>
- Autor, D., Dorn, D. & Hanson, G. (2016). The China Shock: Learning from Labor Market Adjustment to Large Changes in Trade. *Annual Review of Economics*. Vol 8: 205-240
- Batchelor, T. (2015, Aug 4). 'Whining' EU bureaucrats mocked after complaining they feel 'misunderstood and harassed,' *Sunday Express*.
- Carrington, D. (2015). Europe's offshore wind hits record yearly high with six months still to go, *Guardian* Newspaper website. Retrieved from <https://www.theguardian.com/environment/2015/jul/30/europes-offshore-wind-hits-record-yearly-high-with-six-months-still-to-go>
- Cochrane, J. (2105). Why the Euro is a good idea after all, ChicagoBooth. Retrieved from <http://review.chicagobooth.edu/magazine/winter-2015/why-the-euro-is-a-good-idea-after-all>
- COGEN (The European Association for the Promotion of Cogeneration). (2017). What is cogeneration? Available on the COGEN website. Retrieved from [http://www.cogeneurope.eu/what-is-cogeneration\\_19.html](http://www.cogeneurope.eu/what-is-cogeneration_19.html)
- Comen, E., Stebbins, S., Sauter, M. & Frohich, T. (2015). The Best and Worst Economies in the World, 24/7 Wal Street website. Retrieved from <http://247wallst.com/special-report/2015/09/30/the-best-and-worst-economies-in-the-world/2/>
- Coy, P. (2013, January 24). Groupthink in Davos: The Financial Crisis is Over. *Bloomberg Businessweek*.
- Denning, S. (2016). Do Trade Agreements Kill Jobs? *Forbes Magazine*. Retrieved from <https://www.forbes.com/sites/stevedenning/2016/03/08/should-we-blame-trade-agreements-for-loss-of-jobs/#7bcd6571210d>
- Docip. (2017). Directorate-Generals (DGs) of the European Commission, Le Docip, a Documentation, Research and Information Center website. Retrieved from [https://www.docip.org/fileadmin/documents/Docip/Documents\\_permanents/DG\\_Commission\\_europenne\\_EN.pdf](https://www.docip.org/fileadmin/documents/Docip/Documents_permanents/DG_Commission_europenne_EN.pdf)
- EC (European Commission). (2017). The European Union Leading in Renewables. Retrieved from <http://ec.europa.eu/energy/sites/ener/files/documents/cop21-brochure-web.pdf>
- Economist. (2008). The Coming Wave. *The Economist Technology Quarterly 2008*. Retrieved from <http://www.economist.com/node/11482565>

Economist. (2016, February 18). European economic guide. *The Economist European Data Team*.

Economist. (2017, March 11). The Populists' dilemma, p. 51.

EUREL (Convention of National Associations of Electrical Engineers of Europe). (2013). *Electrical Power Vision 2040 for Europe*. Brussels: EUREL General Secretariat; Brussels

Eurobarometer. (2017). Are Europeans optimistic about the future of the EU?. European Commission. Retrieved from [http://ec.europa.eu/commfrontoffice/publicopinion/topics/fs6\\_future\\_40\\_en.pdf](http://ec.europa.eu/commfrontoffice/publicopinion/topics/fs6_future_40_en.pdf)

Eurofound (European Foundation for the improvement of Living and Working Conditions). (2016). Fourth European Quality of Life Survey.

Europa. (2017). The Euro. Retrieved from [https://europa.eu/european-union/about-eu/money/euro\\_en](https://europa.eu/european-union/about-eu/money/euro_en)

European Commission. (2016). Budget: Programmes: ITER. Retrieved from [http://ec.europa.eu/budget/mff/programmes/index\\_en.cfm#iter](http://ec.europa.eu/budget/mff/programmes/index_en.cfm#iter)

European Commission. (2017). ENERGY: The Renewable Energy Transparency Platform. Retrieved from <https://ec.europa.eu/energy/en/renewable-energy-transparency-platform>

Eurostat. (2017). Energy Saving Statistics, data from February 2017. Eurostat. Retrieved from [http://ec.europa.eu/eurostat/statistics-explained/index.php/Energy\\_saving\\_statistics](http://ec.europa.eu/eurostat/statistics-explained/index.php/Energy_saving_statistics)

Eurostat. (2017). Gini coefficient of equivalized disposable income – EU-SILC survey, on Eurostat website. Retrieved from [http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=ilc\\_di12](http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=ilc_di12)

EWEA (European Wind Energy Association). (2013). The 10 biggest onshore wind farms in Europe on the EWAE. Retrieved from [http://www.ewea.org/fileadmin/files/library/publications/statistics/Ten\\_biggest\\_wind\\_farms\\_in\\_Europe.pdf](http://www.ewea.org/fileadmin/files/library/publications/statistics/Ten_biggest_wind_farms_in_Europe.pdf)

Fairtrade. (2017). The Impact of Our Work, the Fairtrade Organization. Retrieved from <http://www.fairtrade.org.uk/en/what-is-fairtrade/the-impact-of-our-work>

Feldstein, M. (2012). The Failure of the Euro. *Foreign Affairs*. Retrieved from <https://www.foreignaffairs.com/articles/europe/2011-12-13/failure-euro>

Ferguson, N. (2011). The 6 killer apps of prosperity, TED talk. Retrieved from [https://www.ted.com/talks/niall\\_ferguson\\_the\\_6\\_killer\\_apps\\_of\\_prosperity](https://www.ted.com/talks/niall_ferguson_the_6_killer_apps_of_prosperity)

Ferris, D. (2012). Oregon races to catch up to Europe in Wave Energy, *Forbes Magazine*. Retrieved from <https://www.forbes.com/sites/davidferris/2012/10/03/in-wave-energy-oregon-races-to-catch-up-to-europe/#48dc2f8e190b>

- Global Trends. (2017). The Future Summarized. *Global Trends*. Retrieved from <https://www.dni.gov/index.php/global-trends/the-future-summarized>
- Hainmueller, J., Hiscox, M. & Sequeira, S. (2014). Consumer Demand for the Fair Trade Label: Evidence from a Multi-Store Field Experiment, Harvard Business School. Retrieved from [http://www.hbs.edu/faculty/conferences/2014-launching-the-star-lab/Documents/FT\\_final\\_2\\_20.pdf](http://www.hbs.edu/faculty/conferences/2014-launching-the-star-lab/Documents/FT_final_2_20.pdf)
- Hanson, S. (2016). Neoliberalism is dead. Long Live new liberalism. Retrieved from <https://www.opendemocracy.net/uk/steve-hanson/neoliberalism-is-dead-long-live-new-liberalism>
- Harvey, F. (2015). EU Energy consumption level falls to 20 year low. London: *The Guardian*. Retrieved from <https://www.theguardian.com/environment/2015/feb/09/eu-energy-consumption-level-falls-to-20-year-low>
- Henning, G. (2010). Differences between the United States and the European Union. The Thinking Federalist. Retrieved from <https://www.thenewfederalist.eu/Differences-between-the-United-States-of-America-and-the-European>
- Hildebrand, P. (2017). Investors have overlooked Europe's brightening prospects. *The Financial Times* Retrieved from <https://www.ft.com/content/28bb4b6a-0e2e-11e7-a88c-50ba212dce4d?mhq5j=e2>
- Howes, G and Monfort, J. (2017). Euro to Dollar Exchange Rate Data, Forecast Coverage and News. The Pound Sterling. Retrieved from <https://www.poundsterlinglive.com/eurusd>
- IEA (International Energy Agency). (2016). IEA raises its five-year renewable growth forecast as 2015 marks record year. Retrieved from <https://www.iea.org/newsroom/news/2016/october/iea-raises-its-five-year-renewable-growth-forecast-as-2015-marks-record-year.html>
- ITER. (2017). Unlimited Energy. The ITER Project. Retrieved from [www.iter.org](http://www.iter.org)
- Jean, J. (2015+). What is the future of solar energy? Retrieved from <https://www.quora.com/What-is-the-future-of-solar-energy>
- Johnsen, S. (2015). Why do Eurozone countries use one single currency? Quora. Retrieved from <https://www.quora.com/Why-do-Eurozone-countries-use-one-single-currency>
- Kjeldsen-Kragh, S. (2001). International Trade Policy. Copenhagen Business School Press.
- Lehmann, J-P. (2016). The EU's Bleak and Alarming Prospects. *Forbes Magazine*. Retrieved from <https://www.forbes.com/sites/jplehmann/2016/02/17/the-eu-s-bleak-alarming-prospects/#2f31a3e878b1>
- Mankiw, G. (2014). *Principles of Economics*, 7<sup>th</sup> Ed. New York: South Western College Publishers.

- Mankiw, G. (2015). They Told You So: Economists Were Right to Doubt the Euro. *New York Times*. Retrieved from [https://www.nytimes.com/2015/07/19/business/history-echoes-through-greek-debt-crisis.html?\\_r=0](https://www.nytimes.com/2015/07/19/business/history-echoes-through-greek-debt-crisis.html?_r=0)
- Martin, R. (2009). Wave Power: The peaks and troughs of the sea are taking on new dimensions as sciences and technology turns waves into a source of electricity. ABC Science. Retrieved from <http://www.abc.net.au/science/articles/2009/02/23/2498704.htm>
- McCauley, L. (2016). Rapid, Affordable Energy Revolution is Possible, Says New Report. Common Dreams. Retrieved from <http://www.commondreams.org/news/2016/01/25/rapid-affordable-energy-revolution-possible-says-new-report>
- Monbiot, G. (2016, April 15). Neoliberalism – the ideology at the root of all our problems. *The Guardian*.
- Monson, T. (2012). Living the Abundant Life, Presidency Message. Latter-Day Saints. Retrieved from <https://www.lds.org/liahona/2012/01/living-the-abundant-life?lang=eng>
- Murphy, R. (2011). Why VAT is Regressive. Tax Research UK. Retrieved from <http://www.taxresearch.org.uk/Blog/2011/01/04/why-vat-is-regressive/>
- Myers, J. (2016). Europe's 10 fastest growing economies. World Economic Forum. Retrieved from <https://www.weforum.org/agenda/2016/02/europe-s-10-fastest-growing-economies/>
- Niskanen, W. (2003). Comparing the US and the EU Constitutions. *The Taipei Times*. Retrieved from <https://www.cato.org/publications/commentary/comparing-us-eu-constitutions>
- Offenberger, A. (2013). Understanding the potential of fusion energy, Exploring Hydrocarbon Depletion. Peak Oil. Retrieved from <http://peakoil.com/alternative-energy/understanding-the-potential-of-fusion-energy>
- Oliveira, I. (2015). EU could break up 'within months' says Asselborn. Politico. Retrieved from <http://www.politico.eu/article/asselborn-eu-end-break-up-schengen-migrants-refugee-crisis/>
- Pomeroy, R. (2012). Repetition: The Key to Spreading Lies. Real Clear Science. Retrieved from <http://www.realclearscience.com/blog/2012/03/say-it-like-you-mean-it-how-lies-can-easily-trump-facts.html>
- Poweronomics. (2017). Traditional economics is dead. Poweronomics. Retrieved from <http://poweromics.blogspot.com/2009/05/traditional-economics-is-dead.html>
- Randow, J. (2015). Euro Area Starts 2017 on Strong Note. Bloomberg. Retrieved from <https://www.bloomberg.com/news/articles/2017-01-24/euro-area-starts-2017-on-strong-note-as-price-pressures-build>
- Reuters. (2017). Euro zone factories start 2017 with fastest growth in nearly 6 years. Retrieved from <https://www.rte.ie/news/business/2017/0201/849208-euro-zone-manufacturing-pmi/>
- Rodrik, D. (2012). *The Globalization Paradox*. New York: W. W. Norton.

- Samuelson, P. & Nordhaus, W. (2009). *Economics*, 19<sup>th</sup> Ed. New York: McGraw-Hill.
- Shankleman, J. (2015). UK installed more solar power than any other European Country in 2014. *The Guardian*. Retrieved from <https://www.theguardian.com/environment/2015/apr/28/uk-installed-more-solar-power-than-any-other-european-country-in-2014>
- Sharma, R. (2017, March 13). The Economic Winds Are at Europe's Back. *Wall Street Journal*, p. A17.
- Stiglitz, J. (2016). *The Euro: How a Common Currency Threatens the Future of Europe*. New York: W. W. Norton.
- Stojanovik, T. (2017). Solar Power Summit – join our round table debates. Solar Power Europe. Retrieved from <http://solarpowereurope.org/newsletter/highlight/>
- ThinkGlobalGreen. (2017). Wave Power. Think Global Green. Retrieved from <https://thinkglobalgreen.org/WAVEPOWER.html>
- Toops, E. (2010). Why there is no EU Constitution? An analysis of Institutional Constitution-Making in the European Union. CUREJ: College Undergraduate Research Electronic Journal, University of Pennsylvania. Retrieved from <http://repository.upenn.edu/curej/123>.
- Ward, W. (2009). Risk, an Inspirational Poem, on the Realistic Recovery. Retrieved from: <https://realisticrecovery.wordpress.com/2009/05/13/inspirational-poem-william-arthur-ward-on-riskn-risk/>
- Wegener, A. (1929). *Die Entstehung der Kontiente und Ozeane*, (*trans.* The Origin of Continents and Oceans). Braunschweig: Freidr. Viewg & Sohn.
- Weisbrode, K. & Hofman, S. (2009). Europe's Love Affair with Bureaucracy. *Foreign Policy*. Retrieved from <http://foreignpolicy.com/2009/12/28/europes-love-affair-with-bureaucracy/>
- Wiesenthal, J. (2013). It's Official: The World's elites declare The Global Economic Crisis to be Over. *Business Insider*. Retrieved from <http://www.businessinsider.com/davos-the-crisis-is-over-2013-1>
- Worstell, T. (2016, September 11). The Euro is a Disaster – Stiglitz, Krugman, Milton Friedman and James Tobin Agree. *Forbes Magazine*.
- WTO (World Trade Organization). (2017). What we stand for. Retrieved from [www.wto.org](http://www.wto.org)