Amanda and I negate the resolution "Resolved: The United States should establish a comprehensive bilateral trade agreement with Taiwan."

Our first contention is gender equality

Right now, Taiwan is on the right track. Taipei Times just last year finds that "Taiwan ranks **first** in Asia and sixth in the **world** for gender equality" in areas such as empowerment and the labor market. Indeed, participation in the labor market grew at nearly **double** the rate of men over the past 10 years.

Unfortunately, establishing a free trade agreement between the US and Taiwan would completely destroy this progress. Trade agreements are rotten at their core. Hardefeldt 17 explains how "gendered exploitation is at the heart of the free trade agenda." We often hear of declarations and the inclusion of gender chapters in trade agreements, and while these make for appealing news stories, they fail to address the myriad of ways our free trade system actually exploits women. Global corporations' goal is to expand their profits and women represent a cheap form of labor for them. Female workers make up most of those employed in the notoriously exploitative export sectors that lack basic employment security and have widespread labor rights violations." Additionally, trade liberalization systemically undermines small-scale farming since it opens up agricultural markets to foreign investors who are attracted to the abundance of cheap land in Asian countries. As such, free trade policies historically devastate female farmers and agricultural workers by stripping women of their land and food production capacity. Global corporations destroy local agricultural industries, forcing farmers into exploitative cash-crop export sectors that largely exclude women. Lappin 18 furthers that trade agreements are a significant barrier to the human rights of women "by lowering the threshold of health protection, food safety and labor standards, by catering to the business interests of large monopolies." This hits women the hardest, as they are most likely to benefit from public expenditures.

Trade agreements with the US both in Taiwan and around the world would be detrimental for society at large. Women's economic empowerment is stripped away by free trade agreements, as they prevent

equal participation in existing markets, decrease women's access to and control over productive resources, and strips women of control over their own lives and bodies. UN Women in 2018 concludes that women's economic empowerment is **crucial** to achieving gender equality. "Women's economic empowerment boosts productivity, increases economic diversification and income inequality." They find that gender gaps cost the economy 15% of GDP and increasing female employment rates would boost GDP by **over 6 trillion dollars.**

Our second contention is protecting the environment.

Cameron in 2021 finds that free trade is on the decline in Asia due to trade barriers, geopolitical rivalries, the COVID-19 pandemic, and regional inequality. In fact, the region has seen its lowest growth rates since 1967. Voting affirmative changes that. Lardy 04 warrants that a free trade agreement between the US and Taiwan would facilitate further trade liberalization within the rest of Asia. It will set a precedent that emboldens other countries in the region to also consider trade agreements with Taiwan.

An increase in free trade agreements would be catastrophic as it massively increases emissions and destroys renewables. Sakashita 15 indicates that there is a direct connection between the energy that powers international trade and the carbon in our atmosphere. Free trade rules ruin large renewable energy projects that encourage locally based economies all around the world. International shipping uses dirty bunker fuel which can produce up to a billion tons of carbon emissions. Trade that happens through aviation and sea accounts for a large portion of emissions as well. Fourage 15 furthers that there are insufficient regulations to prevent multinationals from destroying resources on a massive scale. Mining, for example, destroys natural resources which causes pollution and deforestation.

The impact, however, is not only contained in Asia. Gaspar in 2021 explains that as the world's biggest population and the fastest growing part of the global economy, Asia's steps to fight global warming are felt across

the entire planet. "In our global fight against climate change, Asia is a gigantic domino that cannot fall." Parncutt in 2019 concluded that unchecked emissions will cause a climate catastrophe, including starvation, extreme weather, disease spread, and thousands of deaths that will devastate the most vulnerable while driving mass extinctions of critical species.

Because there is no planet B, we are proud to negate this resolution.

Gender

Taiwan is notoriously known for its advancements in gender equality.

Taipei Times, 1-9-**2021**, "Taiwan No. 1 in Asia, world No. 6 for gender equality," No Publication, https://www.taipeitimes.com/News/taiwan/archives/2021/01/09/2003750242

Taiwan No. 1 in Asia, world No. 6 for gender equality Taiwan ranks first in Asia and sixth in the world for gender equality, according to a self-assessment published on Tuesday by the Executive Yuan's Gender Equality Committee. The committee said that its rankings were based on the Gender Inequality Index introduced in 2010 by the UN Development Programme. The composite index measures inequality between female and male achievement in three areas [such as] — reproductive health, empowerment and the labor market. The index ranges from 0, which indicates that men and women fare equally, to 1, which indicates that women fare poorly. As Taiwan is not a member of the UN, it does not appear in the official rankings. However, by applying the criteria from the index, the committee calculated that Taiwan's 2019 reading was 0.045, placing it sixth worldwide and first in Asia. In the 2019 ratings, Switzerland was first with a score of 0.025, followed by Denmark (0.038) and Sweden (0.039), it said in a report. In Asia, Taiwan's rating was better than South Korea's (0.064, No. 12 worldwide), Singapore's (0.065, No. 13) and Japan's (0.094, No. 25), the committee said. The labor force participation rate for women aged 15 or older in Taiwan Was 51.4 percent, compared with 67.3 percent for men, it said. Despite the gap, female participation grew at nearly double the rate of men over the prior 10 years, it said. In terms of pay difference, women made 14.2 percent less than men in 2019 — an average of NT\$291 per hour compared with NT\$340 for men which was a 3.7 percentage point improvement from a 17.9 percent gap 10 years earlier, it said. The report said that gender stereotypes, such as ideas that men should study science while women should study the arts, can have long-lasting effects on gender segregation in the workplace. For example, the proportion of female professional researchers in Taiwan — 22.6 percent — is higher than in South Korea and Japan, but remains significantly lower than the UK (38.6 percent) and Finland (33.7 percent), the committee said. Fewer than 25 percent of Taiwanese workers in the construction, home improvement and transportation sectors are women, the committee said. In the transportation sector, the Taipei MRT rail system had the highest proportion of female drivers at 22.5 percent, while the Taiwan Railways Administration had the lowest at 1.2 percent, the report said. Taiwan passed a marriage equality law in May 2019, under which 1,257 male couples and 2,830 female couples were married in the first year since its enactment, it said.

Unfortunately, a free trade agreement with the United States would wreck this equality – trade agreements are rotten at their core.

Sophie **Hardefeldt**, 12-9-**2017**, "Free trade is bad for women. A WTO declaration won't change that. ," openDemocracy, https://www.opendemocracy.net/en/opendemocracyuk/free-trade-is-bad-for-women-wto-declaration-won-t-change-that/

Don't be fooled by the news of a trade and gender declaration at next week's World Trade Organisation (WTO) meeting in Buenos Aires, or by stories of Canada's new 'feminist' approach to trade. Gendered exploitation is at the heart of the free trade agenda - a few tweaks to the edges won't make it feminist. In fact, it won't do anything much at all. If we really want an international trade system that works for women, tokenism won't cut it. we need to overhaul our approach to trade. Trade policy has traditionally been presented as gender neutral, with women described as beneficiaries of an international trade system which, as this story goes, increases their employment opportunities and expands their financial independence. But after two decades of free trade fundamentalism, inequality is on the rise and the world's richest 8 men now have as much wealth as the poorest 50% of the population. In 2017, women still make up majority of the world's poor. The notion that trade is gender neutral, and free trade good for women, simply doesn't stand up to the evidence. Hence the push for gender aware trade policy. The problem is that non-binding measures like WTO declarations and the inclusion of gender chapters in trade agreements might make for nice news stories, but they won't address the myriad ways our free trade system exploits women, particularly women of colour. This exploitation has been well documented in the ever expanding manufacturing sectors, where women represent nothing more than a cheap form of labour for global corporations looking to expand their profits. Female workers make up most of those employed in the notoriously exploitative export sectors, particularly in garment and textile manufacturing. Most of these

women lack basic employment security and experience widespread labour rights violations. working up to 16 hours a day, seven days and week while not even earning a living wage. But it doesn't stop there. Female farmers and agricultural workers have been devastated by free trade policies that open up agricultural markets to foreign investment. Trade liberalisation has systematically undermined subsistence and small-scale farming, opening up countries to corporate land-grabs that strip women of their land and food production capacity. Local agricultural industries that are unable to compete with global corporations have also been decimated, forcing farmers into exploitative cash-crop export sectors that largely exclude women. The outcome is widespread food insecurity that destroys communities and deepens women's poverty. Modern trade deals, like the CETA and the prospective TISA deal, are more focused on establishing a regulatory framework that lock-in liberalisation, deregulation and privatisation than regulating trade at all. Provisions that open up public services to privatisation and increase the price of medicine are bad for everyone, but they hit women the hardest. It's women and girls that go without medical treatment when it becomes too expensive. And it's women that fill the gaps where public services are no longer affordable, which adds to their domestic labour and care responsibilities while reducing their access to education and healthcare. And as inequality increases, as we know it will, it's women that will be plunged further into poverty. A non-binding gender declaration won't reverse the tide of privatisation and it won't signal a move away from the liberalisation and deregulation agenda that forms the core of our free trade system. If governments are serious about developing trade policy that works for women, we need a new approach to trade. An approach that's not underpinned by a corporate agenda built on the exploitation of women. An approach that actually works to address poverty and inequality. This means paring back trade agreements to the regulation of trade in goods and granting human rights, labour rights and environmental standards supremacy over trade rules. It means protecting governments' right to regulate - so they can make public policy that tackles gender inequality. It means enabling countries in the Global South to use tariffs and subsidies to protect their economies as they develop, so they can build industrial strategies that are compatible with their development agendas. In short, it means trade policy based on evidence not ideology.

There's lots of reasons for this.

Kate **Lappin**, 1-12-**2018**, "Free trade or women's rights?," PSI, https://www.world-psi.org/en/free-trade-or-womens-rights

Globally, there are more than 3,000 bilateral or multilateral agreements that govern global trade and investment. Recent large multilateral agreements such as the Regional Comprehensive Economic Partnership (RCEP) and the Trans-Pacific Partnership (TPP) have sought to expand the scope of agreements to provide for global governance over an increasing number of economic issues outside of the UN and World Trade Organization (WTO) systems. The agreements, designed primarily to enable the unhindered flow of global capital, are a significant barrier to the realization of the human rights of women. Advocates argue that trade agreements are designed to reduce barriers to trade and "level the playing field" by ensuring foreign investors are not negatively impacted by national laws or regulations that preference locals or that impact on foreign investors. In reality, trade agreements are designed for and by large multinational corporations that are able to displace smaller local businesses and which use their political power to gain significant advantages. Trade agreements may provide benefits to people who have the capacity to capitalize on new market opportunities and workers classified as "highly skilled." However, as women are less likely to hold large amounts of capital, are most commonly engaged in the informal sector, are less likely to have secure land rights and are more likely to benefit from public expenditure in health, education, water and energy, trade agreements have a discriminatory effect. In addition, trade agreements expose a large majority of the global population to violations of their human rights. In 2015, 10 UN Human Rights Council mandate holders voiced concerns about the impact of trade and investment agreements on human rights, jointly as well as in separate reports. The collective statement warned that trade agreements "are likely to have a number of retrogressive effects on the protection and promotion of human rights, including by lowering the threshold of health protection, food safety and labor standards, by catering to the business interests of pharmaceutical monopolies and extending intellectual property protection." Researchers who have analyzed the economic impact of existing preferential trade agreements have found that there "is a marked increase in the concentration of economic activity within countries following the formation of these agreements, which results in the deepening of economic inequality." The reduction in tariffs denies governments an important source of revenue, as well as depriving them of an instrument capable of balancing the advantages foreign multinational producers have over developing countries. Tax revenue in the Asia-Pacific region represents a low 17.6 percent of gross domestic product, and any reduction in revenue will either have to be replaced by regressive taxes, such as goods and services or value added taxes, which have been found to have discriminatory effects, or reduced public services. Tariffs can make up an important percentage of income, particularly in economies with underdeveloped tax systems and where tax incentives are used to drive foreign direct investment. Reduced public expenditure

impacts most heavily on the poor and particularly poorer women. Funding cuts generally focus on reductions in subsidies, public wages and social protection payments. Each of these has a disproportionately negative impact on women and children, as women are more likely to claim social welfare payments, use public services and be employed by the public sector. The costs of an ISDS case can have an enormous impact on public expenditure in developing countries. To date, the majority of cases heard by ISDS tribunals have been against developing countries and lodged by multinational corporations from developed countries. The awards have amounted to hundreds of millions, and even billions, of dollars. For example, \$2.4 billion was awarded against Ecuador in a case brought against it by an oil company ordered to clean up its toxic waste. The award represents more than 6 percent of the small nation's national budget - more than its health budget. Argentina has faced 53 claims totaling \$80 billion after it introduced regulations to address a financial crisis that was pushing many people into poverty. The Philippines is reported to have spent \$58 million in legal costs to defend two cases; this money could have paid the annual salaries of 12,500 teachers. While not all cases are made public, given the secretive nature of ISDS, we know that in at least 50 ISDS cases, claims of at least \$31 billion have been lodged against states negotiating the RCEP. The RCEP will expose them to even more cases. Countries have also been denied access to tax revenue, with at least 24 countries being sued by corporations using the ISDS mechanism to challenge tax laws or attempts to collect tax. Displacing women's subsistence farming A central purpose of trade agreements is to open up agriculture and land to foreign investment. Many countries restrict foreign investment in land and provide leases or concessions to investors on a case-by-case basis. It is likely that RCEP, such as other trade agreements, will incorporate a "national treatment" provision that requires governments to provide foreign investors with the same rights and privileges as local investors. Consequently, unless governments provide a specific exemption in the agreement, land can be purchased by foreign corporations and individuals. Among the attractions of Asian countries to foreign investors is the apparent abundance of cheap land. In fact, approximately 19 million hectares of land in Asia has been acquired in deals involving foreign investors in the last decade. In the period following the financial crisis, speculative finance rushed to the security of land, resulting in a 334 percent increase in cross-border real estate investments between 2008 and 2015, and investors intensified pressure on governments to enable foreign land investments. This makes small land holdings vulnerable, particularly where documentation of land tenure is not secured. Furthermore, the expansion of export-oriented crops has led to decreasing availability of land used for subsistence agriculture that is primarily tilled by women. Small-scale, subsistence farms of women are unable to compete with huge agrobusiness monopolies because of economies of scale and the benefits of large capital, coupled with pre-existing discrimination that means women are less likely to have access to inputs, credit, technology and information. Further, they are less likely to be able to fulfill the regulatory requirements that come with cross-border, digitalized trade. In addition, the removal of tariffs on imports means that subsidized food can flood a local market and displace women's produce. The North American Free Trade Agreement (Nafta) was associated with two million farmers losing their land, resulting in high levels of internal and external migration. For women, this meant migrating into dangerous special economic zones where labor exploitation and violence against women has been well documented, or across borders to become migrant domestic workers. While foreign investment has led to large areas of arable land being developed for the production of food crops, far from enhancing the food security of local communities, investment in the agricultural sector has frequently been for the purpose of developing export industries that largely benefit large corporations. The expansion of commercial agriculture also leads to the depletion of communal land and resources, which women frequently rely on for the collection of fuel, water and fodder for medicinal purposes. Further, these large-scale projects are often undertaken without sufficient consultation of women in local communities and without their free, prior and informed consent. Forced evictions and reductions of land and forest cause shifts in labor and migration patterns. Women leave their homes and work as laborers in factories or plantations or as domestic workers with substandard labor conditions. Militarization of land concessions, which allows intimidation and violence by armed security guards (including private security, state police and military), has also threatened the security of women human rights defenders involved in land disputes. Intellectual property rights for corporations For generations, women have saved seeds, shared them and developed a wealth of information around plant varieties and uses. This practice enables sustainability and biodiversity and reduces costs. For rural women in the Global South, 80 percent of the total seed supply is produced on farms. The popularity of cash crops and high yields means farmers are increasingly dependent on commercial seeds. They now face penalties, including criminal penalties, for practicing seed saving and sharing methods. RCEP and other trade agreements currently being negotiated include intellectual property protections that go well beyond the requirements of the WTO agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS). If the TPP provisions are replicated in RCEP, states will be required to sign the International Convention for the Protection of New Varieties of Plants (UPOV91). The convention provides intellectual property protection for seeds and plants, which generally prohibits farmers from saving and sharing protected seeds, including seeds that they had been freely using prior to the protection being granted. UPOV91 allows agrifood companies to utilize both the plant breeder rights restrictions and patent protection. Effectively, it means that farmers must purchase new seeds every year. While an exemption exists for small landholders who grow subsistence crops, the exemption applies only to landowners. The vast majority of women farmers are not landowners. Consequently, the provision exacerbates existing discrimination that precludes women from land ownership. Currently developed countries within the RCEP - Australia, Japan, South Korea and Singapore - are signatories to UPOV91, while Vietnam is the only "developing" country within RCEP to have signed on to the convention. However, after years of pressure from both multinational seed corporations and developed countries seeking to impose the convention through trade agreements, Thailand has also recently drafted laws to comply with UPOV91. The draft law makes seed saving and sharing subject to criminal sanctions

that can include imprisonment or a fine or both. Women farmers are faced with the choice of risking prison or going into debt annually to buy seeds that, if crops fail, could bankrupt them. Women's health and access to medicines Trade agreements seek to harmonize intellectual property rights awarded to corporations and remove hard-fought TRIPS provisions designed to give developing countries flexibilities in the implementation of intellectual property rules. The intellectual property provisions within the TPP, if replicated within RCEP, would have a profound impact on women's rights. The provisions within the TPP extend the period of protection for medicines and protections for small variations, and provide additional periods

for testing and licensing. Women's health outcomes are threatened by trade agreements that enable the privatization of health services and reduce access to generic and subsidized medicines. Trade agreements increasingly include service chapters that require state services to be opened to foreign investment if any part of the industry is currently provided by the private sector. Women's access to affordable medicines is threatened, particularly by the inclusion of the two largest providers of generic medicines, India and China, in RCEP. Monopoly protections awarded to pharmaceutical companies will significantly increase the costs of medicines, which will particularly impact on the poorest. one study found that the TPP will drastically reduce the percentage of HIV-positive Vietnamese with access to antiretroviral therapy from 68 percent to 30 percent. In Malaysia, the price of the breast cancer drug Herceptin could go from \$2,600 to \$44,000. Evidence suggests that when health care is privatized or becomes more costly, rural and low-income families are less likely to spend on women's reproductive health care. Intellectual property rights have been awarded for traditional plants and medicines used by rural and indigenous women for generations, but "discovered" by foreign corporations (or foreign corporations who have purchased the rights from researchers). For example, women in northern Thailand have used a traditional root, pueraria mirifica, for various hormonal problems, including those related to menstruation, menopause and fertility, and, consequently, have some of the lowest breast cancer rates in the world. They often sell the product at local markets. In 2004, the United States was awarded a patent for the plant, including for simply drying or pulverizing it. Deregulating and privatizing services The liberalization of trade in services is a key provision of RCEP. The purposes of the trade in services chapter and related provisions are twofold. First, to increasingly privatize services such as water, energy, health and education. And second, to remove the regulations on those services that might relate to costs, licensing requirements, environmental impacts, health standards, competencies of the provider, accessibility and technical standards. RCEP may replicate or even go further than the trade in services chapter and domestic regulation disciplines contained in the TPP. The chapter goes beyond the WTO's General Agreement on Goods and Services, in that the GATS listed services to be liberalized, while recent chapters drawn from the TPP cover all services unless specifically excluded. In addition, the WTO allows for domestic regulation that is in the public interest, while trade agreements restrict this to regulations that are "objective," "transparent" and "not more burdensome than necessary." A regulation that requires water to be provided to poorer or rural communities, or sets pricing rules, may be deemed "burdensome" or not "objective." Meanwhile, the "ratchet" provisions of trade agreements also prevent governments from introducing new regulations or deciding to create publicly owned services in areas that have private investors operating. The principle that investors must receive "fair and equitable" treatment is the most used principle in investors' successful claims against nations. The principle is used to protect investors' "legitimate expectations," which includes an expectation that regulations won't change (even following a democratic electoral change) and that nations will utilize state power to protect investor profits. When governments seek to reverse privatization, or remunicipalize essential services, in order to meet their human rights obligations, they are exposed to the risks of ISDS cases, as has occurred in Argentina and Mexico. The privatization of public goods and services has had discriminatory effects, because women are users of those services, because quality public services are able to reduce the impacts of discrimination and because when governments abdicate their responsibilities to provide health, education. water, energy, social services and care, women are generally expected to provide the cushion that will sustain lives and economies in their absence. Preventing affirmative action RCEP may limit the capacity of governments to meet their obligation to use temporary special measures and to eliminate discrimination. Article 4 of the Convention on the Elimination of All Forms of Discrimination Against Women (CEDAW) obliges governments to use "temporary special measures" or affirmative action to eliminate discrimination against women. The CEDAW Committee has elaborated on Article 4 through the convention's General Recommendation 25, making it clear that temporary measures may be required until equality of outcomes are achieved in relation to all substantive articles. The committee provided a nonexclusive list of possible measures that may be taken to comply with the provision: "The term 'measures' encompasses a wide variety of legislative, executive, administrative and other regulatory instruments, policies and practices, such as outreach or support programs; allocation and/or reallocation of resources; preferential treatment; targeted recruitment, hiring and promotion; numerical goals connected with time frames; and quota systems." Governments use a range of policy techniques to advance rural women's access to land tenure and markets and to support their local production. As the government is the largest buyer in most markets, pro-women procurement can benefit rural women's livelihoods and help to retain their local industries. However, the inclusion of government procurement chapters means that all government procurement, apart from defense or other identified industries, must treat foreign investors equally, and governments are therefore prevented from preferencing local industries. Recently, the Indian government reportedly expressed concerns about the proposed government procurement chapter within RCEP, precisely because of the impact it could have on their capacity to procure from marginalized women and other groups. Similarly, a number of governments have introduced lower land taxes or registration fees when women are registered as landholders or co-owners. The "National Treatment" provisions could prohibit such incentives unless they are also extended to foreign investors. The CEDAW Committee has noted that states must not just focus on preventing direct discrimination or enabling equality of opportunities. They must create substantive equality - "an enabling environment to achieve equality of results." Nations must therefore address indirect forms of discrimination where, ostensibly, neutral policy decisions lead to unequal outcomes and widen gender and other inequality gaps. For example, a decision to privatize water might not be explicitly discriminatory, but it nevertheless constitutes a form of indirect discrimination if the decision results in women, who routinely bear the burden of water collection, having to walk additional miles to collect water and increasing the amount of unpaid work they do. The committee has also noted that achieving substantive equality may require universal public access policies in the provision of public goods. In its General Comment 20 on nondiscrimination, the committee suggests that "ensuring that all individuals have equal access to adequate housing, water and sanitation will help to overcome discrimination against women and female children, and persons living in informal settlements and rural areas." Affirmative action may also be subject to costly ISDS lawsuits, should it be seen to reduce the profits of foreign investors. South Africa, for example, was sued by a group of Italian companies arguing that provisions in the Mineral and Petroleum Resources Development Act, which required 50 percent of mining shares to be sold to black South Africans as part of the Black Economic Empowerment legislation, were illegal under the Italy-South Africa and Benelux-South Africa bilateral investment treaties. The South African Constitutional Court had previously ruled that the compensation provided to the investors was adequate and did not amount to expropriation, and yet the threat of the lawsuit being held in the World Bank's secretive International Center for the Settlement of Investment Disputes forced the government to negotiate a

settlement and reduce the quota to 26 percent. South Africa has since decided to cancel all bilateral investment treaties containing ISDS mechanisms. Any attempt to remedy existing levels of exclusion for women using affirmative action tools could similarly be subject to a lawsuit. ISDS has been commonly used to challenge decisions made by governments in relation to the licensing and regulation of extractive industries. Women have been at the forefront of movements to prohibit extractive industries in their communities and movements to seek remedies and clean up their environments. and are detrimentally impacted when investor protections come ahead of their human rights. Similarly, corporations responsible for the provision of water and energy have been able to sue governments when their licenses have been revoked for noncompliance. This includes failure to provide services to rural communities, which are not a profitable target group for corporations. Subsequently, trade agreements limit the capacity of governments to ensure rural women are provided with essential resources, goods and services. The UN Independent Expert on the Promotion of a Democratic and Equitable International Order suggests that "far from contributing to human rights and development, ISDS has compromised the State's regulatory functions and resulted in growing inequality among States and within them." Women's labor rights Preferential trade agreements are designed to facilitate greater market competition and the freer flow of global capital, enabling increased access to resources and cheap labor in signatory countries. Investors are attracted to the comparative advantage of cheap, nonunionized and unregulated labor provided by countries such as Cambodia, Myanmar and Vietnam. Consequently, preferential trade agreements push down wages in an attempt to compete in a race to the bottom for cheaper exports across the region, not just in signatory countries. If other countries wish to continue to attract investment, they need to reduce costs. Export industries often have little cost margin, meaning that wages and conditions are targeted. Nafta provides a good example of the likely consequences of preferential trade agreements that include countries at different stages of development. While labor productivity grew after the signing of the agreement and exports increased, wage compensation in Mexico declined by 20 percent between 1994 and 2011. As women comprise an increasing percentage of workers in export industries, they are most likely to experience the downward pressure on wages, conditions and rights. The investorstate dispute regime has also been utilized to challenge increases in wages and conditions (for example, in the case of Veolia versus Egypt), and UN experts have noted that such cases have a "chilling effect" on governments. As women make up the largest percentage of minimum and low-paid workers, they depend more on state wage-setting mechanisms. Gender-equal trade? Governments are starting to recognize that trade agreements may have an adverse impact on women's human rights. Consequently, the Canada-Chile and Chile-Uruguay free trade agreements have included new gender equality chapters, and it appears that Canada may seek to include a chapter on gender equality in any renegotiated Nafta. The RCEP does not include a proposed gender chapter, nor does it include the largely ineffectual chapters on labor or the environment that are included in the TPP. However, the Canadian gender chapter, like the labor chapter, is unenforceable and of little or no value. The UN Conference on Trade and Development analyzed the chapters and found these major deficiencies.

More trade agreements globally and in Taiwan would be detrimental.

UN Women – Headquarters, July **2018**, "Facts and Figures: Economic Empowerment," https://www.unwomen.org/en/what-we-do/economic-empowerment/facts-and-figures

Women's economic empowerment is central to realizing women's rights and gender equality. Women's economic empowerment [this] includes women's ability to participate equally in existing markets; their access to and control over productive resources, access to decent work, control over their own time, lives and bodies; and increased voice, agency and meaningful participation in economic decision-making at all levels from the household to international institutions. Empowering women in the economy and closing gender gaps in the world of work are key to achieving the 2030 Agenda for Sustainable Development [1] and achieving the Sustainable Development Goals, particularly Goal 5, to achieve gender equality, and Goal 8, to promote full and productive employment and decent work for all; also Goal 1 on ending poverty, Goal 2 on food security, Goal 3 on ensuring health and Goal 10 on reducing inequalities. When more women work, economies grow. Women's economic empowerment boosts productivity, increases economic diversification and income equality in addition to other positive development outcomes.[2] For example, increasing the female employment rates in OECD countries to match that of Sweden, could boost GDP by over USD 6 trillion, [3] recognizing, however, that. growth does not automatically lead to a reduction in gender-based inequality. Conversely, it is estimated that gender gaps cost the economy some 15 percent of GDP.[4] Increasing women's and girls' educational attainment contributes to women's economic empowerment and more inclusive economic growth. Education, upskilling and re-skilling over the life course – especially to keep pace with rapid technological and digital transformations affecting jobs—are critical for women's and girl's health and wellbeing, as well as their income-generation opportunities and participation in the formal labour market. Increased educational attainment accounts for about 50 per cent of the economic growth in OECD countries over the past 50 years.[5] But, for the majority of women, significant gains in education have not translated into better labour market outcomes.[6] Women's economic equality is good for business. Companies greatly benefit from increasing employment and leadership opportunities for women, which is shown to increase organizational effectiveness and growth. It is estimated that companies with three or more women in senior management functions score higher in all dimensions of organizational performance

Gender Equality Weighing

Falquet 17' finds that studies of globalization have an androcentric bias, in that these studies are always centered around men.

That's why Jeong 01' writes that it is imperative we begin to look at neoliberal policies through the eyes of women. It is not only that women are affected more, but that these policies function in a gender-biased way.

Jules **Falquet**, **2017**, "A Gender Perspective on Neoliberal Globalization" No Publication, http://julesfalquet.com/wp-content/uploads/2017/11/Art-GB-J-Falquet-Service-women-in-the-shadows-of-armed-men.pdf

Too many analyses of globalization are flawed by a deeply androcentric bias; that is, they are centred around male human beings, their areas of interest, and the relationships they establish amongst themselves (Mathieu, 1991). Fortunately, since the 90's, diverse works of feminist literature emerging from sociology, sociology of labour, political science, and economics, often with close ties to social movements, have offered alternative perspectives. I will present some of these analyses2 here, focusing on the question of transformations in economic activities. At first, some scholars tried to correct the androcentric bias by 'adding women' to their analyses, mainly by highlighting the neoliberal trend to draw women into the labour market. Presenting these important works, we will examine the deep ambivalence neoliberalism holds for women by drawing attention to the type of activities globalization reserves for most non-privileged women in the world – that is, mainly 'service' sector activities. Then, because a true gender perspective means thinking together and dialectically the two terms of the structural social relations of sex3, I will next present analyses which might seem somewhat disconnected, but are on the contrary key to understanding globalization: those looking at war, militarism, and different incarnations of 'armed men'.

Joo-Yeon **Jeong** and Seung-Min **Choi**, 12-15-**2001**, "NEOLIBERALISM THRHOUGH THE EYES OF WOMEN," No Publication, https://focusweb.org/neoliberalism-thrhough-the-eyes-of-women/

Neo-liberalism was not something that hit Korea suddenly in 1997, but is a historical development of capitalism that has gradually taken form during the last few decades. It had been women workers who had felt the effects of globalisation first and thus were the first ones to resist. It was the women workers of Korea, who fought militantly during the 70s and early 80s for a democratic union and worker's rights. Women workers formed the foundation for the modern labour movement, although this fact often tends to be forgotten. During the late 80's, the Korean economy reconstructed itself into focusing on export-oriented heavy industries, whose workers were predominantly men, and women workers were left behind. The onslaught of neo-liberal globalisation and the impoverishment that came with it was also felt first by women workers. Just after the economic crisis, the women worker's movement moved a big step forward when independent women's trade unions began to beformed5. The unions came out of the need to address the specific issues of women workers that could not be properly dealt with in a general union -organising irregular workers, the unemployed, domestic workers and those women who worked in small companies where there are no unions. The percentage of women participating in unions still remain at a meagre 5%, due to the fact that general unions do not accommodate workers who are not regular workers. It was only in 1997, when the IMF enforced austerity measures and structural adjustment programs also affected male workers, that the people's movement in Korea fully realised the destructive nature of neo-liberalism. From then on, flexibility of labour has become the main target of struggle for the working class. Spotlight was finally thrown on the fact that neo-liberalism attack women workers foremost, but unfortunately the longtime demands and struggles of women workers are being put aside, as the struggles against 'irregular labour' is again being organised in a male-oriented fashion. The establishments of these unions are very significant in the history of the Korean labour

movement and also in the women's movement. Just as the strategies of capitalists change, the organisation of the working class also much change to resist effectively. The essence of neo-liberalism and its gender-bias cannot be resisted through the traditional method of organization concentrating on male, regular workers from big enterprises. However, these newly formed women's unions still have further developments to make and many obstacles to overcome, in their struggles against national and international capital. The unions must question the role of neo-liberal globalisation and its strategy of incorporating flexibility measures into the labour market, for a full understanding of the situation of women workers and organizing of more radical struggles that go into the fundamental core. And at the same time, the worker's movement of Korea must go through structural changes to accommodate the ever increasing irregular workers, and must also make more effort into overcoming the patriarchal values that are still prevalent inside people's movement. Many women activists and unionists have started to address the issues of gender discrimination and sexual violence inside the people's movement, which up until now had been covered up. Over the years, many fervent and militant women activists have had to leave the movement because of discrimination and violence. It was always considered women's fault, or victimized women were forced to 'forgive' for the 'greater cause'. Many women activists, workers and unionists are uniting themselves and are calling upon the movement to tackle the problem of hierarchy, discrimination and violence. TOWARDS ORGANIZING GLOBAL RESISTANCE OF WOMEN As we have seen, neo-liberal globalisation affects all areas of society, to attain flexibility of the labour market solely for the interests of transnational capital. In the case of Korea, this process of enforcing structural adjustment and flexibility has devastated the lives of the people, especially women. Capitalist industrialisation has brought about the rise of the women's proletariat and neo-liberal globalisation has further feminised the proletariat while at the same time impoverishing the proletariat into the verge of slavery. This is not a matter of women merely being affected 'more' – we must look at the mechanisms of neo-liberalism that operate in a gender-biased way. Indeed, neo-liberal globalisation itself feed upon gender discrimination and effectively use traditional patriarchal values to exploit women further. Patriarchal ideologies act to crush any attempts of women to politicize and form resistance. However, the essence of neo-liberalism is slowly being manifested and women have begun to fight back. Feminisation of labour and feminisation of poverty signify increased exploitation of women, but precisely because of that, provide the possibility for organization and resistance, nationally and internationally. Women must now go forth as subjects in uniting the people in our fight against neo-liberal globalisation. Instead of being incorporated into a ready-made movement of men or middle-class elite women, instead of taking the problems of discrimination for granted, women workers, farmers, indigenous peoples, migrants and other grassroot peoples of the Third World must form a broad solidarity. We must analyse globalisation from women's perspective, plan strategies that conform with the particular needs of women, propose alternatives that include women as

equal subjects, keep to the principle of internationalism, and unite with other oppressed groups in the mass resistance in the fight

against neo-liberalism – and go beyond in creating a world based on equality.

Enviroment

Free trade is on the decline in Asia.

Cameron 21, Shaun Cameron, 10-21-2021, "Not-So-Free Trade in the Asia Pacific," Australian Institute of International Affairs, https://www.internationalaffairs.org.au/australianoutlook/not-so-free-trade-in-the-asia-pacific/

In the Asia Pacific, free trade has facilitated economic rise. However, trade barriers, geopolitical rivalries, the COVID-19 pandemic, and regional inequality has hampered free trade. Over the last 60 years, the Asia Pacific has grown from an agricultural economy to a factory for the world. It has also been described as the fastest-growing economic region on Earth by the United Nations. The region's trade was expected to rise to all-time high levels in 2020, sending 41.8 percent of global exports and accepting 38.2 percent of imports. The World Bank forecasts economic growth in the Asia Pacific to continue by 2.5 percent in 2021. Free trade has facilitated this rise and will be pivotal in pushing economic growth in the future. But paradoxically, this rise has also led to

barriers to free trade as well as inequality. Since 2000, free trade agreements (FTAs) have proliferated in the Asia Pacific, bringing a steady decline in tariffs paid between bilateral and multilateral trading partners. In contrast, non-tariff measures have increased significantly, a trend seen within Association of Southeast Asian Nations (ASEAN) states and in the Asia Pacific more broadly. Non-tariff measures are trade barriers that can fulfil legitimate policy objectives, such as protecting public health, domestic trade, and environmental safety, but can also include a range of protectionist applications aimed directly at inhibiting imports. Non-tariff measures can include quarantine and biosecurity measures, regulations, licences, and certification standards. Other non-tariff measures can include border and administration fees, surcharges, and intellectual property costs. Of the ten members of ASEAN, six applied non-tariff measures to 100 percent of their imports in 2015, with these measures making up 76 to 78 percent

of trade costs and tariffs accounting for only two to three percent. Barriers to trade had an estimated value of 1.6

percent of global GDP in 2018, the equivalent of \$1.4 trillion dollars. These hurdles have been significant for firms

in major South-East Asian sectors such as automotive, agri-food, and seafood. The World Bank further outlined how these barriers disproportionately affected industries in food processing, textiles, and agriculture in the Asia Pacific broadly, and it has been estimated that trade within South Asia has the potential to increase from \$23 billion to \$67 billion if non-tariff measures were reduced. These costs can be significant barriers to trade, particularly for developing nations such as those in the Pacific who must also mitigate natural costs arising from geographical location, lower technological development, and security. The proliferation of bilateral FTAs has further created a barrier to trade, known as the "noodle bowl problem" due to the large number of tangled and overlapping agreements. Bilateral agreements comprised 74 percent of all concluded FTAs in Asia in 2009. In contrast to multilateral trade, which enforces a single consistent set of trade rules, bilateral FTAs in the region can vary widely in their content and standards. The large number of such FTAs interconnecting the Asia Pacific undermines the cohesiveness of regional trading systems and imposes unnecessary costs. FTAs in the Asia Pacific have also been criticised for their low quality, in that many agreements are between states with relatively low trade volumes and have a narrow coverage of trade sectors. These types of FTAS have been the majority, rather links with more important and valuable trading partners such as the United States or China. Interviews in 2009 with Asia Pacific firms also discovered that a significant number do not

even utilise FTAs due to a lack of information, delays, and administrative costs. Multilateral deals in the Asia Pacific have also been hampered by actions from other powers, such as the Trump administration pulling the US out of the

Trans-Pacific Partnership (TPP) in 2017. If the TPP had continued to operate, trade tariffs for the majority of countries involved would have dropped to zero by 2030 and non-tariff measures would have declined. The GDP of Vietnam was projected to have tripled and Malaysia's doubled. Other participants also lost potential growth. Geopolitical rivalries between the US and China have infected other multilateral FTA deals in the region, with Asia Pacific nations being forced to signal their allegiances by signing onto the TPP or the Regional Comprehensive Economic Partnership (RCEP). The East Asia Free Trade Area represents another space for rivalry, in that FTAs must be concluded between China, Japan, and Korea separately or together before the larger deal can be made, with other signatories forced to wait for leadership jostles to conclude. Wealthier, developed nations also have more capacity for and potential to gain from free trade and liberalisation in the Asia Pacific, as opposed to benefits derived by developing

states. The impact of China's territorial disputes in the South China Seas will significantly impact trade in the Asia Pacific if there is an escalation into conflict that blocks sea trade. The economy of

Singapore is projected to fall by 22 percent as a result of such a trade disruption, with economies in Vietnam, Philippines, and Malaysia potentially contracting by 10-15 percent. The effect of potential downturns in large Asia Pacific economies like China can further impact trade in the region. One example relates to the real estate and construction sectors in China, accounting for 29 percent of China's GDP. China is responsible for 20 percent of the world's imports of steel and copper. With the escalating Evergrande property crisis comes the threat that domestic economic woes in China could radiate throughout the region. The recent restrictions on Chinese domestic electricity represent another example, by which the reduction of output by

China's wool conversion factories of 40 percent and has led to economic ramifications in the Australian wool market. The COVID-19

pandemic has had a further significant impact on trade in the Asia Pacific. Overall, the Asia Pacific lost \$2.2 trillion in potential trade in 2020. Although economies rebounded in 2021, the region has seen

its lowest growth rates since 1967, with supply chains and trade being significantly disrupted. Unemployment and underemployment have surged, and the Asia Pacific saw working hour losses totalling the equivalent of 140 million full-time jobs in 2020. Developing areas such as the Pacific have been hit particularly hard in what has been described as a potential lost decade for trade and economic growth. School

closures represent a loss of potential human capital. Trade liberalisation is one avenue to reduce non-tariff measures and other trade barriers in the Asia Pacific and to increase trade, and has already seen success in air liberalisation between Sri Lanka and India. A move towards multilateral FTAs will work to address the noodle bowl problem and the lack of standardisation evident in bilateral FTAs, as well as decreased tariffs and non-tariff measures. Multilateral approaches to aid and assistance will further bolster developing economies, assist in mitigating the effects of COVID-19 on trade and supply chains, facilitate rebounds in manufacturing potential and human capital, and alleviate social effects such as poverty.

A free trade agreement between the US and Taiwan leads to the proliferation of bilateral FTAs.

Nicholas **Lardy** & Daniel Rosen, **2004**, Prospects for a US-Taiwan Free Trade Agreement, Institute for International Economics, December,

https://www.piie.com/publications/chapters_preview/383/5iie3675.pdf

"A US-Taiwan FTA could facilitate further trade liberalization with the rest of Asia if it were to set a precedent that emboldened other countries in the region to consider bilateral FTAs with Taiwan. Of course, if Beijing were to withdraw its diplomatic pressure on other Asian nations not to negotiate bilateral FTAs, then the importance of a bilateral US-Taiwan FTA in this regard would be moot. If a US-Taiwan FTA is the only avenue for Taiwan to join the game of competitive liberalization, the negotiations should seek to break new ground. An expanded liberalization agenda would presumably increase the economic benefits of an FTA well beyond the limited gains projected by economic models. That in turn, would make the bilateral agreement more attractive to political supporters of trade liberalization. Obvious areas of negotiations include agriculture and intellectual property protection. For the United States, beyond facilitating Taiwan's participation in intraAsian trade liberalization, a US-Taiwan FTA takes on geo economic and geopolitical considerations that go beyond the economic case for such an agreement

This would be horrible as free trade massively increases emissions and destroys renewables.

Sakashita 15 (Miyoko Sakashita, Oceans Director, Center for Biological Diversity, "Free Trade: The Hidden Costs to Our Oceans and Climate" 11/16/15,

http://www.huffingtonpost.com/miyoko-sakashita/free-trade-the-hidden-cos_b_8560336.html)

This cornucopia is a testament to the American love affair with free trade, the cornerstone of global economic growth. Support for free trade

policies has been an article of faith in American politics for the last two decades, opposed only by a labor movement in decline, a few environmental groups, and anti-globalization activists who cut their teeth fighting the North American Free Trade Agreement and the creation of the World Trade Organization. Yet as we grapple with runaway fossil fuel emissions that are changing the climate and creating a warmer, more acidic ocean, it might be worth testing that faith -- particularly as the latest free trade pact, the Trans-Pacific Partnership, heads to Congress for approval. After all, there is a direct connection between the energy that powers international trade and the carbon that's accumulating in our atmosphere and seas. Early free trade agreements like NAFTA- ironically signed in 1992, the same year as the Rio Declaration, the first international pledge to address climate change - were as bad for the environment as they were for the American manufacturing base. As writer Naomi Klein discusses in This Changes Everything, free trade rules have been used to scuttle huge renewable energy projects and programs that encourage locally based economies all over the world - the very things we must promote to reduce our carbon emissions -- all of which get deemed illegal protectionism that violates free trade agreements. To be fair, the TPP is an improvement on early free trade deals. It includes environmental violations in the main agreement (rather than an unenforceable side agreement, as with NAFTA), making them subject to the same dispute settlement process as other trade violations. It also has policies that explicitly address destructive fishing practices in member countries and crack down on the illegal trade of goods from protected wildlife, such as the ivory trade, although its enforcement provisions are weak and full of loopholes. But the TPP - which doesn't include the words "climate change" or even "carbon" -- would also exacerbate climate change and ocean acidification in a variety of ways. For example, it would allow the 11 other countries in the pact to begin importing natural gas from the United States, fueling the domestic fracking boom that is polluting our water and contributing to global warming with unregulated releases of methane, a powerful greenhouse gas. On a more basic level, the TPP reinforces the economic colonialism of free trade - allowing corporations to exploit the cheapest labor and natural resources without tariffs, and shipping goods around the world that could be produced locally - unnecessarily lengthening supply chains and burning more carbon, which itself is problematic in a warming world with acidifying oceans. International shipping uses cheap and dirty bunker fuel - essentially the gunk left over when oil is refined - that fouls the air and water. In 2012, it produced nearly a billion tons of carbon dioxide emissions, or about 2.2 percent of the worldwide total. That carbon pollution is

rising rapidly along with free trade policies, doubling since 1990 and projected to increase by up to 250 percent by 2050, bringing it to as much as 14 percent of total emissions. And that's not even counting the 10 percent of international trade that happens by aviation, an industry that accounts for almost 5 percent of total greenhouse gas emissions and is projected to triple by 2050. Yet climate scientists say that sharp increase in emissions simply can't happen if we expect to keep global warming under 2 degrees Celsius, after which the impacts to our climate and ocean between dangerously unpredictable. Instead, they say shipping emissions must drop to 1990 levels by 2050. Trade groups say slower speeds, new ship designs, and alternative energy sources could help, but that doesn't address the more fundamental problem. The free trade paradigm has driven the export of U.S. manufacturing jobs to other countries, predominantly China, which is the world's leading emitter of greenhouse gases. In outsourcing production jobs, the U.S. also outsources its carbon emissions. The Global Carbon Project last year found that almost all the U.S. emissions reductions since 1990 have resulted from outsourcing production to countries like China, where production-related emissions are rising faster than consumption-related emissions, even though it's the world's most populous country. And those emissions transfers are increasing at 11 percent per year, largely because of free trade policies, a source of global warming that is barely being addressed in the negotiations leading up the Paris climate talks

next month. It isn't just carbon emissions that are being fueled by consumption in the U.S. and other wealthy countries. We create the demand that causes other countries to produce all those throwaway plastic products and packaging now swirling in the North Pacific Gyre, the biggest garbage dump in the world, collecting toxins along the way and sending them up the aquatic food chain. And international trade has spread invasive species (such as zebra mussels, cholera, and toxic algae blooms) around the world, traveling in the ballast water of ships and colonizing foreign lands, where they compromise biodiversity and clog up intake pipes and other vital infrastructure. In an era when we're having trouble breaking our fossil fuel addiction despite its damage to our planet, when our ocean is becoming more polluted and corrosive, and we're rapidly losing the biodiversity on which healthy ecosystems rely, it's worth reexamining our assumptions about the value of free trade. With almost half of our carbon emissions and over 90 percent of our planet's warming being absorbed by the ocean, the ships that criss-cross our planet everyday may be carrying more than we're bargaining for. So the cheap goods on our grocery store shelves might not be such a good deal after all.

Fourage 15 furthers that

Fourage 15 (Alexia Fourage, Ibon International "COP21 SERIES: Free trade undermines our right to health and the fight against climate change" November 2015, http://iboninternational.org/article/2015/11/cop21-series-free-trade-undermines-our-right-health-and-fight-against-climate-change)

So although it is time to fight climate change, there are structural issues within our economic system that prevent us from waging an effective war against climate change. Free trade is one of those structural issues. The European Union, by concluding free trade agreements with the countries of the South, enables multinational organizations to increase their exports and presence in new markets. [7] The free trade agreements enable these organizations to move to countries of the South where labor is cheap and resources (wood, minerals, land, water) plentiful and accessible. [8] This results in deforestation, intensive agriculture, mining or depletion of the ground water. Too often there are insufficient laws and regulations to stop multinationals from destroying resources on a massive scale. [9] For example, when Coca- Cola established itself in the village of Plachimada in India, the company started to pump the local water supply at a rate of 1.5 million liters per day, drying out the groundwater. [10] In the Philippines, mining on a large scale destroys natural resources, causing air and river pollution, and deforestation of millions of acres [11] The human rights in the Philippines are completely violated.

Conflicts over mining account for 42 murders of environmental and and defenders since 2002. [12] This abuse of the natural environment, and the resulting pollution, increases CO 2 emissions and contributes to climate change. [13] These are examples of the people of the South being the first victims of climate change with the least resources to adapt.

Global warming in Asia impacts the globe.

Vitor **Gaspar**, 3-25-**2021**, "Asia-Pacific, the Gigantic Domino of Climate Change," IMF Blog, https://blogs.imf.org/2021/03/25/asia-pacific-the-gigantic-domino-of-climate-change/

Forget the poetic flap of a butterfly's wings in Beijing causing rain in Central Park. Climate issues in Asia-Pacific are measured in superlatives. [As] The world's biggest population. Two of the three largest carbon dioxide-emitting countries and the largest share of emissions globally. The most exposed to extreme weather events. Some of the smallest and most vulnerable countries. Also, [and] the fastest-growing part of the global economy and many of the leaders in green technology. It's not hard to see that what Asia does to fight global warming will be literally felt across the whole planet. Pursuing a green recovery in the aftermath of COVID-19 might sound daunting, but it's actually a great opportunity to direct recovery spending into stimulating sustainable jobs and growth. Green investment is generally more labor-intensive than the regular kind. The near-term extra spending and jobs would strengthen economies. In the longer-term, Asian economies would become more sustainable and resilient, and could build on their lead in many of the emerging green technologies. What policies are needed? A newly released IMF staff paper makes recommendations in three areas. More carbon taxes, more compensation

Gaspar concludes that

Vitor **Gaspar**, 3-25-**2021**, "Asia-Pacific, the Gigantic Domino of Climate Change," IMF Blog, https://blogs.imf.org/2021/03/25/asia-pacific-the-gigantic-domino-of-climate-change/

The IMF is helping by integrating climate in our annual country economic assessments and scaling up capacity development to ensure government officials have the needed skills to handle these complex issues. Butterflies still matter... In a 1952 short story, American science fiction writer Ray Bradbury imagined a man from 2055 who travels to the past and, by accidentally stepping on a butterfly, changes the outcome of his day's presidential election. It was "a small thing," Bradbury writes, "that could upset balances and knock down a line of small dominoes and then big dominoes and then gigantic dominoes." In our global fight against climate change, Asia-Pacific is a gigantic domino that cannot fall. As the world recovers from COVID-19, now is the time and opportunity to ensure ourselves a better 2055.

Emissions disproportionately impact <u>vulnerable</u> and <u>marginalized</u> populations – causes hunger, disease, and increased physiological violence

Parncutt 19 (Richard Parncutt, Professor @ the Centre for Systematic Musicology, University of Graz, "The Human Cost of Anthropogenic Global Warming: Semi-Quantitative Prediction and the 1,000-Tonne Rule," Front. Psychol., 10/16/19, https://doi.org/10.3389/fpsyg.2019.02323, TM)

Greenhouse-gas emissions are indirectly causing future deaths by multiple mechanisms. For example, reduced food and water supplies will exacerbate hunger, disease, violence, and migration. How will anthropogenic global warming (AGW) affect global mortality due to poverty around and beyond 2100? Roughly, how much burned fossil carbon corresponds to one future death? What are the psychological, medical, political, and economic implications? Predicted death tolls are crucial for policy formulation, but uncertainty increases with temporal distance from the present and estimates may be biased. Order-of-magnitude estimates should refer to literature from diverse relevant disciplines. The carbon budget for 2°C AGW (roughly 1012 tonnes carbon) will indirectly cause roughly 109 future premature deaths (10% of projected maximum global population), spread over one to two centuries. This zeroth-order prediction is relative and in addition to existing preventable death rates. It lies between likely best- and worst-case scenarios of roughly 3 × 108 and 3 × 109, corresponding to plus/minus one standard deviation on a logarithmic scale in a Gaussian probability distribution. It implies that one future premature death is caused every time roughly 1,000 (300–3,000) tonnes of carbon are burned. Therefore, any fossil-fuel project that burns millions of tons of carbon is

probably indirectly killing thousands of future people. The prediction may be considered valid, accounting for multiple indirect links between AGW and death rates in a top-down approach, but unreliable due to the uncertainty of climate change feedback and interactions between physical, biological, social, and political climate impacts (e.g., ecological cascade effects and co-extinction). Given universal agreement on the value of human lives, a death toll of this unprecedented magnitude must be avoided at all COSts. As a clear political message, the "1,000-tonne rule" can be used to defend human rights, especially in developing countries, and to clarify that climate change is primarily a human rights issue. Introduction Anthropogenic global warming (AGW) is a human rights issue (Amnesty International, n.d.; Caney, 2010). It is violating the rights of future people—especially, in developing countries that will suffer the most. Lancet Countdown on health and climate change has warned that "A rapidly changing climate has dire implications for every aspect of human life, exposing vulnerable populations to extremes of weather, altering patterns of infectious disease, and compromising food security, safe drinking water, and clean air (watts et al., 2018). UN Environment (2019) found that "nearly one quarter of all deaths globally in 2012 could be attributed to modifiable environmental risks, with a greater portion occurring in populations in a

vulnerable situation and in developing countries" (p. 22). From a legal perspective, "a right to a healthy environment in various formulations is recognized by the constitutions of 118 nations around the world" (Kravchenko, 2007, p. 539). Progress toward global emissions reductions has been consistently slow (Ge et al., 2019). Contrary to the primary aim of the United Nations Climate Change Conferences held yearly since 1995, emissions increased by 2.2% per year on average between 2005 and 2015 (Le Quéré et al., 2018) and peaked again in 2018 (International Energy Agency, 2019). The current rate of carbon emissions is some 10 times greater than the last time global mean surface temperature (GMST) was relatively high, 56 million years ago (Gingerich, 2019). AGW has therefore become a global emergency (Ripple et al., 2017). In responding to this challenge, it may help to express the urgency in new terms by shifting attention from economic to human costs, which are incomparably greater (Nolt, 2011a, 2015). The aim of this contribution is to defend the human rights of present and future people from the fatal indirect consequences of AGW caused by greenhouse gas (GHG) emissions and AGW by addressing the quantitative relationship between fossil carbon burned now and future deaths

attributable to AGW. The broader context involves interculturality and anti-racism research. The **failure** Of rich countries and

corporations to adequately mitigate AGW is racist in the sense that the protagonists are mainly white and the victims are mainly black (cf. Kaijser and Kronsell, 2014). AGW may also be considered sexist, given known gender differences in effects of AGW on health and life expectancy (World Health Organisation, 2011). AGW is ageist in that the emissions of today's older people will

disproportionately affect today's young people (Page, 1999). How much fossil carbon must be burned to cause a future human death? Despite the inherent uncertainties, it is interesting to attempt a zeroth-order estimate, based on semi-quantitative considerations of the current state of global climate, the current global rate of emissions, and the complex, non-linear relationships among the amount of carbon burned, corresponding changes in GMST, current mortality in connection with poverty, and future death tolls. The question is explicitly interdisciplinary: it involves humanities (e.g., philosophy, history), sciences (e.g., physics, mathematics, statistics, psychology), practically oriented disciplines (e.g., law, medicine, international development), and disciplines that mix these groups (economics, sociology). "The greatest potential for contributions from psychology comes not from direct application of psychological concepts but from integrating psychological knowledge and methods with knowledge from other fields of science and technology" (Stern, 2011, p. 314). Of all the living and non-living things that humans encounter in their everyday lives, human lives are usually considered the most valuable (Harris, 2006)—regardless of the assumed value of non-human life (Kellert, 1997). Moreover, people are universally considered inherently more important than money (cf. Sayer, 2011); this general idea holds even if a human life can be assigned monetary value corresponding to the amount that others are willing to pay to save it. The value of a quality-adjusted life year (QALY) according to this criterion may effectively be of the order of \$100,000 (Hirth et al., 2000). Can the continued use of fossil fuels be justified after comparing today's health and longevity benefits with future health and longevity deficits due to AGW? The following text begins with a summary of ways in which AGW will shorten human lives in the future. The idea of a human life as a mathematical unit of value is then introduced. After a consideration of the use of numbers and words in public discourse on AGW, and the psychological mechanisms that might distort estimates of future death tolls, an approximate top-down estimate is presented for the relationship between carbon burned now and deaths caused in the future. Ethical and political implications are addressed. How Anthropogenic Global Warming will Cause Premature Deaths Historically, burning carbon has had a large positive effect on human life expectancy and quality of life (Steinberger and Roberts, 2010; Jorgenson, 2014). Without explicitly considering AGW, United Nations (2017b) estimated that from 1960 to 2100, global mean life expectancy will have increased from 46 to 83 years, among other things due to increasing availability of energy for agriculture, heating, cooking, transport, manufacture, and construction. But carbon-based economies are also causing life-years to be lost in the future. The political challenge, therefore, is to maintain increases in life expectancy due to industrialization while minimizing losses in life expectancy due to AGW by replacing carbon-based power sources by sustainable ones. The following brief summary of widely accepted climate impact

predictions illustrates the magnitude of the problem: 1. Rising seas will threaten coastal homes and cities. Salination of agricultural soils will destroy farming land. 2. Dry areas will become drier with longer droughts, loss of ground water, and deglaciation. Agriculture will be seriously affected. 3. Serious storms (hurricanes, cyclones, and tornadoes) will become more frequent and dangerous (Knutson et al., 2015), destroying crops and buildings, and causing floods and epidemics (cf. the cholera outbreak that followed Cyclone Idai in Mozambique in 2019; Nguyen et al., 2019). 4. Heat waves will become more frequent and intense. When wet-bulb temperatures approach human skin temperature, body temperature can no longer be regulated by

perspiration—with fatal consequences. 5. The current rate of species extinction (biodiversity loss) already 100-1,000 times faster than without humans—will continue to increase (sixth mass extinction event). Each of these points will affect supplies of food and fresh water, increasing current death rates due to hunger and disease. In addition, AGW will affect the nutritional content of staple crops such as rice and wheat; when carbon dioxide (CO2) levels double relative to pre-industrial levels, an additional 175 million people may be zinc deficient; 122 million, protein deficient (Smith and Myers, 2018). These points may interact with each other, causing ecological cascade effects and co-extinctions. AGW will also increase the incidence and magnitude of international conflicts including water wars (Petersen-Perlman et al., 2017). There is an additional risk of "runaway" AGW, in which GMST continues to rise after anthropogenic emissions stop—driven by natural positive feedback processes that are not canceled by negative ones: 1. When ice melts, less radiated heat from the sun is reflected back into space, so more is absorbed, causing more ice to melt (Albedo). 2. As the carbon content of oceans and soils increases, their ability to absorb CO2 falls (Gattuso et al., 2015). 3. When permafrost (tundra) peat thaws, it releases CO2, methane (CH4), and nitrous oxide (N2O), Causing more warming and melting (Voigt et al., 2017). Permafrost peat contains about 1,700 Pg carbon—about twice as much as the entire atmosphere—of which 30% (68–508 Pg) could be released by 2100 (MacDougall et al., 2012). Atmospheric CH4 concentration has unexpectedly accelerated in recent years (Nisbet et al., 2018). 4. Forests will dry out at the same time as weather conditions that cause fires (dry soil, high temperature, low humidity, and high winds) become more frequent. Fires produce CO2, causing more warming and drying (Gabbert, 2018; Reidmiller, 2018). Forest dieback can be caused by a combination of drought and bark-beetle infestation, caused in turn by AGW (Sangüesa-Barreda et al., 2015). Beetle-caused dieback can switch a forest from a carbon sink to a carbon source (Hansen et al., 2013a). Between 1984 and 2016, the European forest area affected by mortality doubled—largely due to AGW and land-use changes (Senf et al., 2018). 5. Extreme temperatures caused by climate change will increase human energy consumption for heating and cooling (International Energy Agency, 2019). When feedbacks are taken into account, the global carbon budget for limiting AGW to 2 or 1.5°C is reduced by "several years of anthropogenic carbon dioxide emissions at present rates" (Lowe and Bernie, 2018, abstract).