## 1

#### Biopharma R&D is surging, but it’s shaky because of productivity levels – now is not a time to let up

Adams 5/19 [Ben Adams, Ben Adams is a business, science and healthcare journalist, 5-19-2021, "Biopharma R&D 'surged' in 2020, but trial productivity levels a mixed bag: report," FierceBiotech, <https://www.fiercebiotech.com/biotech/biopharma-r-d-surged-2020-but-trial-productivity-levels-a-mixed-bag-report>] // WW LD

A major global pandemic was not enough to stop surging rates of biopharma research and development, but trial productivity still remains below the long-term average. That is according to a new report out by CRO analytics firm IQVIA, which found that funding for early- and late-stage R&D, as well as deals, jumped last year regardless of the pandemic, while aggregate R&D spend for the top 15 companies “reached a record high.” It also found that, overall, clinical trial activity recovered from midyear 2020 to levels above 2019–even without factoring in COVID-19 trials, which clearly didn’t exist the year before. Total trials reached 4,686, more than 300 extra than 2019 and an 8% rise, with 985 in phase 3, 1,880 in midstage testing and 1,821 in phase 1. But there is more complexity here: There was an increase in the clinical trial productivity index, i.e., the way IQVIA measures how these trials are doing, but in 2020 it found this was mostly due to an improvement in phase 3 trials, widening the gap with phase 1 trials, “which score significantly lower with this index.” When it comes to midstage tests, trials “have consistently been above the overall index” as success rates have been trending up and durations have been trending down, “even as complexity has been rising in phase 2 as rising numbers of endpoints and eligibility criteria are attributes of these trials.” Overall, however, productivity “remains below historic levels,” the report found, as success rates are below the long-term average. This is because the complexity of trials is generally increasing, as are study durations in many diseases, IQVIA’s authors note. Looking at the pipeline of pharma, IQVIA saw that growth in the late-stage pipeline continued in 2020, bringing total expansion to 43% since 2015, as cancer drugs reached record-high numbers. Growth in the early-stage pipeline, including next-generation biotherapeutics, paused in 2020, however. RELATED: The top 10 pharma R&D budgets in 2020 The dismal lack of diversity in clinical trials also continued: African Americans or races identified as Black account for 13.4% of the U.S. population, while the clinical trials used to approve new medicines had a median participation of only 3% in the past six years and “were under-representative 79% of the time from 2015 to 2020,” IQVIA said. Persons of Asian descent are also estimated to comprise 6.5% of the U.S. population, but again, only in 2015 was the median above this threshold, and 52% of trials in the past six years that were used by the FDA to approve medicines had under-representative participation. “The growth in research and development driven by new oncology drugs, new funding and strategic investments is a testament to the resilience and strength of the innovative, global biopharmaceutical industry,” said Murray Aitken, executive director of the IQVIA Institute for Human Data Science, in an accompanying release. “Faced with significant disruptions and the need to reprioritize research and development, the global life sciences industry has demonstrated its ability to meet and even exceed expectations for new and better lifesaving therapies and vaccines.”

#### Patents foster innovation

Grabowski et al 15 [Henry G. Grabowski, Joseph A. DiMasi, and Genia Long, February 2015, "The Roles Of Patents And Research And Development Incentives In Biopharmaceutical Innovation," https://www.healthaffairs.org/doi/10.1377/hlthaff.2014.1047] // WW DL

The essential rationale for patent protection for biopharmaceuticals is that long-term benefits in the form of continued future innovation by pioneer or brand-name drug manufacturers outweigh the relatively short-term restrictions on imitative cost competition associated with market exclusivity. Regardless, the entry of other branded agents remains an important source of therapeutic competition during the patent term. Several economic characteristics make patents and intellectual property protection particularly important to innovation incentives for the biopharmaceutical industry. 5 The R&D process often takes more than a decade to complete, and according to a recent analysis by Joseph DiMasi and colleagues, per new drug approval (including failed attempts), it involves more than a billion dollars in out-of-pocket costs. 6 Only approximately one in eight drug candidates survive clinical testing. 6 As a result of the high risks of failure and the high costs, research and development must be funded by the few successful, on-market products (the top quintile of marketed products provide the dominant share of R&D returns). 7,8 Once a new drug’s patent term and any regulatory exclusivity provisions have expired, competing manufacturers are allowed to sell generic equivalents that require the investment of only several million dollars and that have a high likelihood of commercial success. Absent intellectual property protections that allow marketing exclusivity, innovative firms would be unlikely to make the costly and risky investments needed to bring a new drug to market. Patents confer the right to exclude competitors for a limited time within a given scope, as defined by patent claims. However, they do not guarantee demand, nor do they prevent competition from nonidentical drugs that treat the same diseases and fall outside the protection of the patents. New products may enter the same therapeutic class with common mechanisms of action but different molecular structures (for example, different statins) or with differing mechanisms of action (such as calcium channel blockers and angiotensin receptor blockers). 9 Joseph DiMasi and Laura Faden have found that the time between a first-in-class new drug and subsequent new drugs in the same therapeutic class has been dramatically reduced, from a median of 10.2 years in the 1970s to 2.5 years in the early 2000s. 10 Drugs in the same class compete through quality and price for preferred placement on drug formularies and physicians’ choices for patient treatment. Patents play an essential role in the economic “ecosystem” of discovery and investment that has developed since the 1980s. Hundreds of start-up firms, often backed by venture capital, have been launched, and a robust innovation market has emerged. 11 The value of these development-stage firms is largely determined by their proprietary technologies and the candidate drugs they have in development. As a result, the strength of intellectual property protection plays a key role in funding and partnership opportunities for such firms. Universities also play a key role in the R&D ecosystem because they conduct basic biomedical research supported by sponsored research grants from the National Institutes of Health (NIH) and the National Science Foundation (NSF). The Patent and Trademark Law Amendments Act of 1980 (commonly known as the Bayh-Dole Act) gave universities the right to retain title to patents and discoveries made through federally funded research. This change was designed to encourage technology transfer through industry licensing and the creation of start-up companies. Universities received only 390 patents for their discoveries in 1980, 12 compared to 4,296 in 2011, with biotechnology and pharmaceuticals being the top two technology areas (accounting for 36 percent of all university patent awards in 2012). 13 University licensing trends have generated debate. For instance, there have been recent proposals to encourage the federal government to “march in” and require a university to license a patent or enforce reduced pricing or other terms. 14 The percentage of approved drugs with public-sector patents is relatively small. 15 Nevertheless, if the government exercised its march-in rights in this way, that action could have adverse effects on technology transfer activities and early-stage company investment, particularly if it were to disrupt existing expectations of grantees, licensees, and investors. 12 There have been four petitions to the NIH requesting it to exercise march-in rights on behalf of the federal government; none has been granted. 16

#### Biotech relies on innovation from pharma

Cooper 6 [Garth JS Cooper, independent medical scientist at the University of Auckland, “Fates Intertwined,” March 2006, <https://library.wur.nl/WebQuery/file/cogem/cogem_t4505194e_001.pdf>] //recut WW LD

Biotechnology and pharmaceuticals are inextricably intertwined. Although biotech companies often rely upon the resources of larger pharma companies, the converse is also true. Among other things, biotechs require funding, validation, and access to expertise and markets. Big pharma continues to need ideas and products, and places to outsource risk. The pharmaceutical industry faces uncertainties driven by falling innovation 1,2, its relevance to reducing the global burden of disease , and the equity of access to its products3. If biotechs are not embraced by pharma—they cannot be copied —then as competitors they will increasingly come to dominate the industrial nexus. The issues of both industries need to be addressed together. Apart, biotech and pharma will continue to struggle with the self-determining issues that they currently confront. Working together, the fabric of these industries will be transformed and the world of human therapeutics will flourish.

#### Biotech is key to solving food insecurity

Doyle 08 [Alister Doyle, Environment Correspondent, 6-3-2008, "Biotechnology seen as a key to solving food crisis," U.S., <https://www.reuters.com/article/us-food-summit-biotech/biotechnology-seen-as-a-key-to-solving-food-crisis-idUSL0356693120080603>] // WW LD

“Biotechnology is one of the most promising tools for improving the productivity of agriculture and increasing the incomes of the rural poor,” U.S. Agriculture Secretary Ed Schafer said. “We are convinced of the benefits it offers to developing countries and small farmers,” he told a U.S.-led briefing on the sidelines of the June 3-5 summit seeking ways to combat high food prices when climate change may aggravate shortages. Some green groups say genetically-engineered crops threaten biodiversity while many European consumers are wary of eating products dubbed by critics as “Frankenfoods”. Schafer said biotechnology, including genetically-modified organisms (GMOs), could help produce more food by raising yields and producing crops in developing nations that are resistant to disease and pests. “Genetic engineering offers long-term solutions to some of our major crop production problems,” said Philippine Agriculture Minister Arthur Yap. But he said that it was not a panacea for all of his country’s agricultural problems. ADVERTISEMENT Progress being made in the Philippines included research into rice and coconuts resistant to disease, he said. “We’re also working on virus-resistant papaya, papaya hybrids with a longer shelf life that should be ready for market in 2009,” he said. Climate change could aggravate production around the world with more droughts, floods, disruptions to monsoons and rising sea levels, says the U.N. Climate Panel. In Africa alone, 250 million people could face extra stress on water supplies by 2020. COTTON Burkina Faso Agriculture Minister Laurent Sedogo said the African country had worked with U.S. agriculture group Monsanto to battle pests that blighted the cotton crop. ADVERTISEMENT “We are about to plant 15,000 hectares” of a new crop that was resistant to pests, he said. That would also cut down on the use of pesticides that could damage the health of farmers. The World Bank and aid agencies estimate that soaring food prices could push as many as 100 million more people into hunger. About 850 million are already hungry. Bangladesh said that it was going ahead with efforts to make crops able to survive floods and more salinity in the soil. A cyclone last year “is a wake-up call for all of us”, said C.S. Karim, an adviser to Bangladesh’s agriculture ministry. “It shows the vulnerability of Bangladesh. “

## **2**

#### **FDI is expected to recover but is tentative – uncertainties from pandemic and economic recovery**

UNCTAD 7/21, 6-21-2021, [United Nations Conference on Trade and Development "Global foreign direct investment set to partially recover in 2021 but uncertainty remains," UNCTAD, https://unctad.org/news/global-foreign-direct-investment-set-partially-recover-2021-uncertainty-remains]//anop

Looking ahead, global FDI flows are expected to bottom out in 2021 and recover some lost ground with an increase of 10% to 15% (Figure 2). “This would still leave FDI some 25% below the 2019 level. Current forecasts show a further increase in 2022 which, at the upper bound of projections, bring FDI back to the 2019 level,” said UNCTAD’s director of investment and enterprise, James Zhan. Figure 2 - Foreign direct investment outflows, top 20 home economies, 2017 and 2018 (Billions of dollars) Figure 2 - Foreign direct investment outflows Source: UNCTAD, World Investment Report 2021. Prospects are highly uncertain and will depend on, among other factors, the pace of economic recovery and the possibility of pandemic relapses, the potential impact of recovery spending packages on FDI, and policy pressures. The relatively modest recovery in global FDI projected for 2021 reflects lingering uncertainty about access to vaccines, the emergence of virus mutations and the reopening of economic sectors. “Increased expenditures on both fixed assets and intangibles will not translate directly into a rapid FDI rebound, as confirmed by the sharp contrast between rosy forecasts for capex and still-depressed greenfield project announcements,” Mr. Zhan said. The FDI recovery will be uneven. Developed economies are expected to drive global growth in FDI, both because of strong cross-border mergers and acquisitions (M&A) activity and large-scale public investment support. FDI inflows to Asia will remain resilient as the region has stood out as an attractive destination for international investment throughout the pandemic. A substantial recovery of FDI to Africa and to Latin America and the Caribbean is unlikely in the near term.

#### **The plan decreases foreign direct investment from negative signals – turns case**

Kogan 11, Lawrence A [Lawrence A. Kogan is founder and Managing Attorney of The Kogan Law Group, P.C., a New York City–based multidisciplinary professional services firm specialized in identifying and addressing emerging regulatory, policy and trade risks posed to multinational company assets, operations and supply-chains. (2011), "Commercial High Technology Innovations Face Uncertain Future Amid Emerging “BRICS” Compulsory Licensing and IT Interoperability Frameworks" San Diego International, https://digital.sandiego.edu/cgi/viewcontent.cgi?article=1091&context=ilj]//anop

Similarly, the enactment of national laws and regulations promoting the availability and flexible use by governments of a compulsory licensing mechanism as an exception or limitation to the patent right to secure foreign companies’ patented high technologies at less than their fair market value can increase economic risks and result in acts of regulatory arbitrage and protectionist opportunism by home country as well as foreign companies operating pursuant to divergent business models. The security of property rights has been placed into question where compulsory licenses have been issued or threatened against foreign patented high technologies. Studies have shown that a corresponding reduction in the flow of knowledge-based foreign direct investment (FDI) will follow.81 82 [T]he practice of compulsory licensing comes with a price: the temporary or permanent deprivation of some part of a patent owner’s right to exclude disrupts the investment-backed expectation of the property right. In the future, pharmaceutical companies and other industries dependent upon intellectual property rights may mistrust licensing nations’ promises to protect and enforce patent rights, not to mention copyrights, and trademarks. As a result, industries that find the security of property rights lacking in a given nation may avoid engaging in foreign direct investment with that nation. Because foreign direct investment (FDI) is a major potential source of economic growth for recipient nations, the loss of such investment resources arising from compulsory licensing practices could force developing nations to pay a particularly heavy cost for providing needed medicines for its citizens.83 While government patent policy by itself is an incomplete measurement of a country’s market and investment friendliness, it is generally agreed that such legal protections reflect a country’s interest in fostering business and technology development. Through effective deterrence of imitation, “patents reduce the costs of enforcing contracts and at the same time increase the expected returns on FDI and licensing, which will have a positive effect on technology transfer. Patent rights encourage technology transfer by providing owners with legal certainty.”84 Consequently, the passage of IP laws that do not include a provision for compulsory licensing, for example, may favorably signal to foreign investors that a government is willing to allow strategic business decisions without undue interference and ensure more transparent and unbiased application of commercial laws with the prospect of reduced government corruption.85 “There is little doubt that developing countries who issue compulsory licenses also face additional risks in attracting global capital. Particularly, for MDC’s [middle developing countries], a compulsory license can trigger the loss of significant FDI.”86 If patent ownership rights indicate to prospective investors a firm’s proper regard for its intellectual property security, then surely a company’s willingness to engage in a foreign market where the government has decided to adopt or enforce anti-patent measures will convey negative signals to the investment community about the company, the quality of its management, and the strength and economic value of its patents and associated projected revenue streams. Just as the sale of a product through a low-status selling channel of a product can signal a diminution in brand status to the consumer, exposure of a patent to an uncertain legal environment can signal that the firm may not consider the patent to be as valuable as others believe. Even the threat of an ‘anti-patent’ such as a compulsory license can impair firm equity, thereby reducing the attractiveness of a country as an investment partner. Any firm calculating its returns from FDI will have to account for the possibility of these signaling-based losses.87

#### **The plan decreases foreign direct investment from lack of confidence – turns case**

Mansuri 15, Daniel E. Mr., [In Partial Fulfillment of the Requirements for the Degree of Bachelors of Science "Compulsory Licenses: Damaging Firm Value in the Short Run?" (2015). Honors Theses. 141. http://scarab.bates.edu/honorstheses/141]//anop  
The issuance of a compulsory license by a developing nation may also come with other negative consequences like divestment by large multinational pharmaceutical companies. This can be assessed by the change in total foreign direct investment (FDI) into a country. FDI is the flow of people, capital, and technology from one country to another. In the pharmaceutical industry, FDI is usually the acquisition or production of subsidiaries in the host country(R. C. C. Bird, Daniel R. , 2008). FDI has been used in the past as a metric to judge confidence in the host nation. A significant portion of pharmaceutical companies’ worry comes about due to the potential for compulsory license mishandling and very high transaction costs for both companies and nations. If a country is likely to enter into a compulsory license, it may be in the multinational firm’s best interest to avoid ventures into that country and seek a more friendly business environment rather than deal with the constant threat of a license and the high legal costs if they do come to fruition (Bird, 2009). Additionally, manufacturers tasked with production of the compulsory licensed drug may take advantage of the license and attempt to generate profit rather than alleviate the epidemic through low cost 21 medication. For example, the Washington Post in 2002 reported that “Nearly $18 million worth of reduced-price HIV drugs intended for impoverished Africans have been intercepted by profiteers and shipped back to Europe to be sold at marked-up price” (HST, 2002). While this number is not large for the bottom line of a pharmaceutical company, parallel imports / arbitrages have the potential to eat away significantly at the earnings potential of a drug and also harm the intended beneficiaries of the drug. Due to parallel imports, there is the potential for extreme negative consequences of a compulsory license for the multinational entities (MNEs) profits even if the issuing nation is a negligible market, especially since the company itself cannot control the distribution during a compulsory license. Egypt is an example of what can happen when a country seemingly oversteps their bounds with respect to a compulsory license and then suffers significant negative consequences. Egypt has, historically, been in favor of the use of compulsory licensing for drugs, although perhaps for questionable reasons (Aziz, 2003). It has cited reasons including that the current price of the drug is too high, and it does not meet demand. As unfortunate as this may be, the drug price being too high for a non-essential medication is not in itself enough to warrant the issuance of a compulsory license under the Doha declaration. Egypt’s issuance of a compulsory license on Viagra in 2002 illustrates this perfectly. While some may argue this medication is of the utmost importance, it is difficult to believe that Egypt was suffering so severely, or so much worse than the rest of the world, as to warrant considering it a public health issue. Although “local pharmaceutical manufacturers [accused] the Egyptian Ministry of Health of exploiting Egypt’s poor by granting Pfizer the exclusive right to sell Viagra within Egypt’s 22 borders,” that is not enough reason to grant a compulsory license (R. C. Bird, 2009). The issuance of the license exemplifies the potential misuse of the compulsory license system. This license was granted because of political pressure applied by small pharmaceutical companies within Egypt, not by individuals looking out for the public health of Egyptian citizens. Additionally, the argument made for the compulsory license was a financial one, and not an essential medicine one, which does not constitute a reason for a compulsory license under TRIPS and the Doha Declaration. Multinational corporations met the issuance of a compulsory license by Egypt first with harsh criticism, then with action. Their action was catalyzed by their lack of faith in Egypt’s intellectual property laws. This was highlighted when Egyptian representatives to pharmaceuticals were informed that their weak patent landscape had cost them over $300 million of investment into their pharmaceutical sector (Aziz, 2003). While the Viagra license exemplifies the potential for abuse, the weak patent landscape had already been hurting Egypt’s economy significantly. The amount of foreign direct investment into Egypt declined from about $950 million dollars in 1987 to $425 million in 2002 (R. C. C. Bird, Daniel R. , 2008). While the authors’ conclusion does seem a little ambitious and one-dimensional given Egypt’s tumultuous political scene, it is clear that when used and misused, the issuance of a compulsory license can have strong negative consequences on the non-generic pharmaceutical sector of a nation. While Egypt is a good example of the potential impacts of compulsory license misuse on foreign direct investment, other nations have dealt with similar issues as well. In the time immediately following TRIPS, the Argentine Senate forced through 23 legislation which enacted patent law inconsistent with TRIPS, causing a reduction in trust from MNE’s (R. C. Bird, 2009). For example, upon filing an appeal against a compulsory license, the license would not be suspended immediately. Rather, the patent office would wait for the ruling of the court (R. C. Bird, 2009) to require the suspension of the license. This allowed for imitation to occur easier, causing serious revenue loss for MNE’s. In the period after this new Argentine legislation, countries such as Germany and Sweden actively voiced concern and stated that the lack of IPR was the central concern of business owners considering entering into Argentina (R. C. Bird, 2009). Overall, it has been shown that the issuance of a compulsory license has the potential to cause severe negative consequences to the issuing nation. There is not much information about how the license affects the value of the company that the license was issued against. I will address this by examining how the value of a firm does or does not change after the announcement of a compulsory license.

#### **FDI is key to long term economic stability – it dictates future investments and industries**

Susic et al 17 [I Susic1 , M Stojanovic-Trivanovic2 and M Susic3 1University of Business Studies, Jovan Ducic Street, No 23A, 78000 Banja Luka, Bosnia and Herzegovina 2 Independent University Banjaluka, Veljka Mladjenovica Street No 12E, 78000 Banja Luka, Bosnia and Herzegovina 3Enterprise Fructa Trade – Kort, Marije Bursac Street No 70, 74400 Derventa, Bosnia and Herzegovina 2017 IOP Conf. Ser.: Mater. Sci. Eng. 200 012019. https://iopscience.iop.org/article/10.1088/1757-899X/200/1/012019/pdf]//anop

Foreign direct investments (FDI) represent such a form of investment in which foreign investor keeps the ownership right, provides the control and the management of the firm in which they invested the funds, in order to achieve long-term interests. These investments are the most important instrument of foreign capital inflow because they represent a direct inflow from abroad, i.e. direct inflow of the capital in the economic system of the host country. Foreign direct investment, as a form of international capital mobility, represents an important contributor to more efficient activities in the economy. They provide faster exit to the international market and as the aftermath are ensuring improved the living standard of the society. Evaluation of investment efficiency is the basis for making investment decisions from one country to another, which will consequently lead to improvement of the economy. Foreign investments are a key development factor in the modern economy, and jointly with the trade, represent the most important leverage of an enterprise, organization of production, supplying goods and services on a global scale. FDI are supporting the companies in organizing production on a global scale, providing an efficient supply of raw materials, energy, labor as the input, and are facilitating the placement of products and services as the output in the most important markets in a profitable way. On the basis of such activities, the companies can on optimal way use its advantages in technology, expertise, and economies of scale. Developing countries having high state debt and unfavorable economic situation show huge interest in gaining as higher foreign investments as possible. It has been especially important after bank loans and various financial aid ceased to arrive in some countries. Countries in transition, aiming to integrate into the world economic system, can overcome negative economic tendencies with the help of international capital inflow. Developed countries, faced with a financial crisis, have been also interested in an increased inflow of foreign capital, since the foreign investments are the most important element of development strategies in general. With foreign direct investment is not coming just the capital from one country to another, but also the investment package containing new technologies, managerial skills and new markets. In addition, bearing higher risks, FDIs are significantly increasing the opportunities for making profits. Foreign direct investments are autonomous transactions of long-term capital movements, motivated by economic interests, with the profit at the first place.\

#### **FDI is key to COVID recovery – increases employment and strengthens relations between countries.**

Chalamish et al 20 [Dr. Efraim Chalamish is a Senior Advisor with Duff & Phelps and an Adjunct Professor of Law at New York University. Nicole Y. Lamb-Hale is a former Assistant Secretary of Commerce in the International Trade Administration and Managing Director and Chair of the CFIUS and National Security Practice at Kroll, a division of Duff & Phelps. She is a member of the Board of Directors of the Center for International Private Enterprise. Andrew Wilson is the Executive Director of the Center for International Private Enterprise. ANDREW WILSON, DR. EFRAIM CHALAMISH, NICOLE Y. LAMB-HALE. Center for International Private Enterprise, 10-21-2020, "Foreign Investment in a Post-COVID-19 World," https://www.cipe.org/blog/2020/10/21/foreign-investment-in-a-post-covid-19-world/]//anop

Just as the adverse health effects of COVID-19 will not vanish immediately but will be resolved in stages, so too will the global economy recover in stages, across industries and around the world. As both Western economies and emerging markets consider approaches to accelerate post COVID-19 economic recovery, foreign direct investment (FDI) will be an important tool for success. FDI has been one of the primary drivers of global GDP growth in recent years. FDI not only benefits economies by creating good paying jobs, it also strengthens bilateral and regional diplomatic and commercial relations among countries. Further, FDI enables the private sector to “export” best business practices, such as good corporate governance, anti-corruption, and transparency. During the pre-COVID-19 economic boom, for example, FDI in the U.S. grew dramatically. In 2015, total foreign investment in America peaked at $477 billion. In 2018, FDI fell to $296 billion, but was still significant. Attracting FDI was also an important policy objective in emerging economies prior to the COVID-19 pandemic. According to the UNCTAD 2020 World Investment Report, in 2019, 54 countries introduced at least 107 measures affecting foreign investment, most of them focused on investment liberalization, promotion and facilitation. This effort was led by Asian developing countries and emerging economies. The goal of expanding investment incentives regimes in diverse sectors, from mining to financial services, and streamlining administrative procedures, has been to maintain and increase high volumes of FDI into developing markets. COVID-19 may lead to some changes in the tactics that countries employ to attract FDI. Governments will be under pressure to ensure that the quest for FDI is appropriately balanced with efforts to protect economic resilience and national security. Can FDI stimulate the world economy post-COVID-19? It appears likely, as many assets have seen reduced valuations that can attract foreign investment. Yet while both developed and emerging economies signal that they are open for investment, COVID-19 may lead to some changes in the tactics that countries employ to attract FDI. Governments will be under pressure to ensure that the quest for FDI is appropriately balanced with efforts to protect economic resilience and national security. This may mean increased screening by investment review agencies, such as the Committee on Foreign Investment in the United States (CFIUS). COVID-19 has exposed supply chain vulnerabilities in the U.S. and other countries and has shown how struggles to acquire the products to meet citizens’ healthcare needs can become a matter of national security. In COVID-19’s wake, the scope of transactions to be reviewed by entities like CFIUS from a national security standpoint may need to be expanded to include health care considerations, to ensure that FDI does not interfere with the ability to procure necessary supplies.

#### Continued recession causes war – stats support transition wars, resource conflicts, terrorism, and diversionary wars – other authors don’t base their analysis on global studies

Royal ’10 [Jedediah, Director of Cooperative Threat Reduction at the U.S. Department of Defense, “Economic Integration, Economic Signaling and the Problem of Economic Crises”, 2010, Economics of War and Peace: Economic, Legal and Political Perspectives, ed. Goldsmith and Brauer, p. 213-215]PM

Less intuitive is how periods of economic decline may increase the likelihood of external conflict. Political science literature has contributed a moderate degree of attention to the impact of economic decline and the security and defence behaviour of interdependent slates. Research in this vein has been considered at systemic, dyadic and national levels. Several notable contributions follow. First, on the systemic level. Pollins (2008) advances Modelski and Thompson's (19%) work on leadership cycle theory, finding that rhythms in the global economy are associated with the rise and fall of a pre-eminent power and the often-bloody transition from one pre-eminent leader to the next. As such, exogenous shocks such as economic crises could usher in a redistribution of relative power (sec also Gilpin. 1981) that leads to uncertainty about power balances, increasing the risk of miscalculation (Fearon, 1995). Alternatively, even a relatively certain redistribution of power could lead to a permissive environment for conflict as a rising power may seek to challenge a declining power (Werner, 1999). Separately. Pollins (1996) also shows that global economic cycles combined with parallel leadership cycles impact the likelihood of conflict among major, medium and small powers, although he suggests that the causes and connections between global economic conditions and security conditions remain unknown. Second, on a dyadic level. Copeland's (1996. 2000) theory of trade expectations suggests that 'future expectation of trade' is a significant variable in understanding economic conditions and security behaviour of states. He argues that interdependent states are likely to gain pacific benefits from trade so long as they have an optimistic view of future trade relations. However, if the expectations of future trade decline, particularly for difficult to replace items such as energy resources, likelihood for conflict increases. as states will be inclined to use force to gain access to those resources. Crises could potentially be the trigger for decreased trade expectations either on its own or because it triggers protectionist moves by interdependent states.4 Third, others have considered the link between economic decline and external armed conflict at a national level. Blomberg and Hess (2002) find a strong correlation between internal conflict and external conflict, particularly during periods of economic downturn. They write, The linkages between internal and external conflict and prosperity are strong and mutually reinforcing. Economic conflict tends to spawn internal conflict, which in turn returns the favour. Moreover, the presence of a recession lends to amplify the extent to which international and external conflicts self-reinforce each other. (Blomberg & I less. 2002. p. 89) Economic decline has also been linked with an increase in the likelihood of terrorism (Blomberg. Hess. & Wccrapana. 2004). which has the capacity to spill across borders and lead to external tensions. Furthermore, crises generally reduce the popularity of a sitting government. "Diversionary theory' suggests that, when facing unpopularity arising from economic decline, sitting governments have increased incentives to fabricate external military conflicts to create a 'rally around the flag' effect. Wang (1996), DcRoucn (1995), and Blomberg. Mess, and Thacker (2006) find supporting evidence showing that economic decline and use of force are at least indirectly correlated. Gelpi (1997), Miller (1999), and Kisangani and Pickering (2009) suggest that the tendency towards diversionary tactics are greater for democratic states than autocratic states, due to the fact that democratic leaders are generally more susceptible to being removed from office due to lack of domestic support. DcRoucn (2000) has provided evidence showing that periods of weak economic performance in the United States, and thus weak Presidential popularity, are statistically linked to an increase in the use of force. In summary, recent economic scholarship positively correlates economic integration with an increase in the frequency of economic crises, whereas political science scholarship links economic decline with external conflict at systemic, dyadic and national levels.5 This implied connection between integration, crises and armed conflict has not featured prominently in the economic-security debate and deserves more attention. This observation is not contradictory to other perspectives that link economic interdependence with a decrease in the likelihood of external conflict, such as those mentioned in the first paragraph of this chapter. Those studies tend to focus on dyadic interdependence instead of global interdependence and do not specifically consider the occurrence of and conditions created by economic crises. As such, the view presented here should be considered ancillary to those views.