# A Theory of Hegemon-Provoked Instability, with an Application to NATO and the Ukraine-Russia War

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#### **ABSTRACT**

This paper sets out a simple model of political realism where a nation's security is deemed primary and examines the actions of a hegemon in seeking to protect its hegemony. Contrary to the received view that the presence of a hegemon is beneficial to the world in promoting prosperity and peace, in the contemporary scenario in which there has been a unipolar hegemon in the last three decades, it seems to be in the interest of the hegemon to stir up instability elsewhere. The presence of a military-industrial complex is shown to benefit the hegemon through this instability, even at the expense of its allies. First, it induces greater defense expenditures on the part of its allies, which the hegemon can free-ride on and, second, it earns profits for the hegemon from the sale of weapons to its allies. The validity of the theory is shown in the case of the Ukraine-Russia war, in which NATO (comprising the hegemon, United States, and its allies in the European Union) are pitted against Russia. The paper casts serious doubt on the neoliberal justification that NATO offers for its expansionary actions eastward in Europe.

Key Words: hegemony, stability, NATO, U.S., Russia, Ukraine JEL Classification Nos: D74, D78, D61, P16

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#### 1. Introduction

In a view that was originally proposed by an economist, hegemony was presumed to serve a benign role that promoted economic transactions and stabilized economies. Kindleberger (1973), in his classic book on The Great Depression proposed that this long period of economic depression (1929-1939) arose because Britain, which was the hegemon in the previous century, was too weak to play that role any longer and the United States was unwilling to assume the mantle. The hegemon benefits all countries by providing public goods that few countries have the resources or the willingness to provide. Political scientists, more than economists, have subsequently investigated the view that hegemony provides international stability by supplying public goods and facilitating cooperation [Gilpin (1982), Russett (1993)]. However, Keohane (1984) has argued that a hegemon may not be necessary if countries are already operating in an international system set up by a previous hegemon.

In the field of political science, two contending paradigms seek to explain the evolution of international relations in contemporary times. One is referred to as political realism, and the other as neoliberalism. Political realism emphasizes the claim that, on the international scene, the world is anarchic and there is no substantive enforcing mechanism. Each nation is concerned with its own security and strives to achieve the power to ensure its security. Ethical considerations are secondary in this view because security is the primary concern. A prominent contemporary exponent of political realism is Mearsheimer (2014a).

The currently dominant neoliberal view—which followed as a reaction to liberalism—by contrast, emphasizes freedom, democracy, free markets, and minimal government interventions in these markets (see e.g. Harvey (2007)). Starting in the early 1980s under the leadership of Margaret Thatcher in Britain and Ronald Regan in the U.S., neoliberalism has become the dominant paradigm in the West. The attempted spread of democracy in Eastern Europe, the Middle East and elsewhere is justified in terms of neoliberal values—the spreading of individual freedom, democratic values, and free markets. Since democratic countries are said to be more likely to settle disputes by negotiations and not by war, the spread of democracy will also result in peace, stability, and security—so the argument goes.<sup>2</sup> The record of international relations in

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<sup>&</sup>lt;sup>1</sup> See Korab-Karpowicz (2023) for an overview of the literature on realism.

<sup>&</sup>lt;sup>2</sup> Mearsheimer (2014a) gives a readable account of the differences between realism and liberalism.

the West seems to belie this claim about greater security and stability under neoliberalism, and appears to be more consistent with the realist view of international relations [Mearsheimer (2014a)]. In fact, neoliberal actions seem to stem from a neoconservative view that stresses nationalism, foreign policy, and militarism—features that it shares with realism. This observation is the point of departure of my paper, which is based on political realism. My purpose is to investigate with a simple model how the escalation of conflicts can arise under these circumstances. I offer a general theory of instability provoked by the presence of a hegemon, and then examine the events of the current Ukraine-Russia war to evaluate the theory's claims in the light of its benefits to the hegemon.<sup>3</sup>

In the paper's parsimonious model, the welfare of a nation is determined not only by its material consumption but also by the security that it experiences. This formulation facilitates the incorporation of the existential insecurity that is a routinely invoked as a concern in international conflicts. The model comprises a dominant power ('Hegemon'), a client or a satellite entity ('Client', which could be an aggregate of nations), and a perceived enemy ('Adversary') of the dominant power and the client states. There is a defense alliance ('Coalition') between the Hegemon and Client. The strategic interactions of Hegemon, Client and Adversary determine the equilibrium allocation of resources towards material consumption and defense expenditures.

Incorporated in the model is the role of the military industrial complex (MIC) of the hegemon and the profits it garners through international instability. The profits stemming from conflict or potential conflict induce the MIC to adopt hawkish attitudes. Kahneman and Renshon (2009), in speaking of cognitive biases that humans are prone to, say, "Actors who are susceptible to hawkish biases are not only more likely to see threats as more dire than an objective observer would perceive, but are also likely to act in a way that will produce unnecessary conflict." This suggests that the role played by the military industrial complex in Hegemon's foreign policy can be very serious for itself and, especially, for the Client and the Adversary.

Given the profit orientation of the MIC, it is incentivized to feign or promote threats. Two kinds of threat phenomena are analyzed here. The first has been called *threat inflation* in the literature (see e.g. Friedman (2020) and Cramer and Thrall (2009), the latter offering a summary of various

<sup>&</sup>lt;sup>3</sup> See the article "How War in Europe Boosts the U.S. Economy" by Tom Fairless, *Wall Street Journal*, Feb. 18, 2024.

theories about how threat inflation arises). Here I refer to threat inflation as the scenario where the MIC exaggerates the threat that exists in order to convince its own government and that of Client to demand more arms production. This possibility arises because the MIC has far greater expertise in weapons systems and, therefore, in evaluating external threats. This is the moral hazard that arises when the providers of information on weapons requirements are also the suppliers who serve these same needs. Threat inflation basically distorts the perception of the existing reality.

The second threat phenomenon investigated here is what I call *threat escalation*, where Hegemon, possibly with the help of Client, actually increases the perceived threat by the deliberate creation of instability in the enemies (by funding revolutions, arming the resistance to foreign governments, assassinations of foreign leaders, etc. through covert operations). Threat escalation, for strategic purposes, actually changes the existing reality facing all players. Both forms of threat phenomena seem to be prevalent in the real world, and this paper assesses the differences in their effects on the welfare of the three entities modeled. An important assumption of the model is that Client faces a greater threat from Adversary than does Hegemon. One reason could be that there is greater geographical proximity between Client and Adversary than between Hegemon and Adversary. Another could be that hegemon is more powerful than Client and, naturally is less vulnerable to threats from Adversary. In reality, both reasons could be operating.

One of the findings of this paper is that threat inflation and threat escalation can increase the welfare of the hegemon at the expense of its allies or client states. Not only is Hegemon's goal of retaining its hegemonic status served, the country benefits from an increase in Client's defense expenditures and also profits from the sale of weapons to them. The welfare of the perceived enemy, Adversary, of course, declines in both scenarios. The model's formal representation of the political realist view, therefore, turns on its head for the post-Cold War era the received wisdom due to Kindleberger (1973) that the presence of a hegemon increases stability and promotes peace. This traditional wisdom rests on the neoliberal view of a hegemon and the benefits of Pareto-improving transactions like market exchanges and negotiations. In the post-Cold War period, by contrast, I argue that the hegemon benefits by increasing instability and provoking war, for war is preferred to negotiations. The hegemon's rhetoric of pursuing a

neoliberal agenda of spreading democracy, markets, stability, and peace appears to be contradicted by the provocation to conflict and the refusal to negotiate.

Another important implication of the model is that threat inflation and escalation, while profitable for Hegemon, may actually decrease the welfare of its ally, Client. Furthermore, when there is threat escalation, the probability of Coalition winning an unanticipated war against Adversary, should events spin out of control, is lower. This arises because of the moral hazard of each member within Coalition in economizing on defense expenditures at the expense of the other member in the face of escalation.

The events leading up to the Ukraine-Russia war are then examined in this paper and the sequence of events is analyzed in the light of the model. In particular, the events leading to threat inflation and threat escalation by the U.S. (here Hegemon) are chronicled. The proposed realist model suggests that these events are precisely what one would expect from a hegemon. The adverse effects of the Ukraine-Russia war on EU countries (here Client) and Russia (here Adversary) are briefly reviewed in the light of the current state of empirical work. This raises the question of why the EU allies of the U.S. went along with the persistent escalation and a steadfast refusal to negotiate. The answer I propose depends on what transpired regarding European security and defense after 1991, when the Soviet Union collapsed. The discussion leads to the conclusion that, considering their current outside options, the EU countries are better off accepting a decline in welfare in the Ukraine-Russia war than to opt out of NATO (here Coalition).

The rest of the paper is organized as follows. The next section provides a model that incorporates security considerations of the three players in the model. The equilibrium when the Hegemon and Client operate as a coalition against Adversary is derived and the effects of increases in the two kinds of threats mention are derived. In Section 3, the paper applies the model to the events that led to the Ukraine-Russia war. Concluding thoughts are presented in the last section.

## 2. A Simple Model of Hegemon-Induced Instability

To investigate the issues raised in the Introduction, I develop a model comprising three entities, labeled Hegemon, Adversary, and Client. Not all of the them need to be individual countries; one or more, especially Client, can be a collection of countries aggregated for analytic convenience. Hegemon and Client form an alliance (dubbed Coalition) against Adversary. However, Hegemon is necessarily an individual country that is here taken to be the current hegemon in a unipolar world. Adversary, if not aspiring to be a hegemon, may be a country that refuses to accept the hegemony of Hegemon. The model offered here is general. A special application to follow later is one where Hegemon is the U.S., Adversary is Russia, and Client is the group of European Union countries, with the U.S. and the EU countries belonging to NATO (Coalition).<sup>4</sup>

Hegemon provides many public goods by which all players generally benefit. It provides a stable environment and monetary system to facilitate economic transactions like trade, lays down the common norms for behavior, provides financial assistance in adverse circumstances, becomes a lender of last resort, etc. [Kindleberger (1973), Gilpin (1987)]. While the provision of numerous public goods by Hegemon provides benefits to the participating countries, Hegemon also receives substantial benefits for itself, its capitalists and corporations, by being in a position to dictate the terms of the international institutions. If Hegemon loses its hegemonic status and enters into a world with two localized hegemons, this benefit would dramatically decline. It is to prevent this and maintain the status quo that Hegemon would engage in conflict with Adversary.

The focus here is on the aspect of security that the hegemon presumably supplies. I introduce a very parsimonious static model in which each entity's welfare is dependent on two broad categories: material wellbeing and existential security. The emphasis on security captures the essential aspect of the realist view of political science, namely, countries are primarily concerned about their security and identity as a separate nation [Mearsheimer (2014a)]. Material wellbeing here is captured by the amount of the GDP is allocated to consumption, denoted by x. Security, denoted by S, depends on the defense expenditure of the country and also those of the others. Defense expenditures of allies add to a nation's security while those of enemies reduce it.

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<sup>&</sup>lt;sup>4</sup> It is convenient to include the United Kingdom as a member of the EU for modeling purposes even though the UK opted out of the EU on January 31, 2020. Also, not all of the 27 countries in the EU belong to NATO, but 23 do. In the light of this, it is convenient here to assume for the model that all of EU belongs to NATO.

Foregone material consumption is the opportunity cost of resources devoted to security. The welfare function, W, of all the nations are posited to be of the form

$$(1) W = x^{\alpha} S^{\beta},$$

where the exponents  $\alpha$  and  $\beta$  are exogenous positive fractions (to ensure diminishing returns), with  $\alpha + \beta < 1$ . When referring to individual entities, subscript i, i = 1,2,3 will be used, respectively denoting Hegemon, Adversary, and Client.

Security, of course, depends on the defense expenditures by or on behalf of a country. Within Coalition, defense expenditures are a public good: they benefit all members in the alliance.<sup>5</sup> In this context, Hegemon's security is enhanced by its own expenditures and Client's but is diminished by those of Adversary. So Hegemon's true security level may be written as

$$(2) S_1 = (g_1 + g_3) - \theta g_2,$$

where the parameter,  $\theta$  (with  $0 < \theta < 1$ ) measures the extent to which a dollar's worth of Adversary's defense expenditure undermines the effect on security of Hegemon's expenditure. We take  $\theta$  as a measure of the existential threat Hegemon faces from Adversary.

There is a military-industrial complex (MIC) comprising capitalist firms, lobbyists, and politicians in Hegemon, which is presumed to be the only entity in the model with an MIC. The MIC can exaggerate the danger from Adversary. As a result, the parameter  $\theta$  is inflated to  $\theta(1 + \mu)$ , where  $\mu \ge 0$  can be taken as a measure of the influence of Hegemon's MIC in Coalition. Thus, the *perceived* security level of Hegemon may be written

(3a) 
$$S_1 = g_1 + g_3 - \theta(1 + \mu)g_2,$$

Adversary's security level,  $S_2$ , can be written as

(3b) 
$$S_2 = g_2 - \varphi(g_1 + g_3),$$

where  $\varphi$  (with  $0 < \varphi < 1$ ) is the analogue for Adversary of  $\theta$  to Hegemon;  $\varphi$  is a measure of the threat to Adversary from Coalition. We may expect that  $\varphi \ge \theta$  (though this need not be assumed) because Adversary is not the hegemon, that is, Adversary is more threatened by

<sup>&</sup>lt;sup>5</sup> This is in the spirit of NATO's Article 5, which refers to collective defense by the members of the alliance. According to it, an attack on one member of NATO will be taken to be an attack on all members.

Coalition than Hegemon is by Adversary. This may be because Adversary is in closer geographical proximity to an ally (Client) of Hegemon. It is assumed in this model that, since there is no capitalism-based analogue of the MIC in Adversary, the perceived and actual levels of security are identical and are given by (3b). That is, Adversary does not inflate threats.

To economize on the number of parameters, it is presumed that Adversary's defense expenditure undermines Client's security to the same extent as the Coalition's defense expenditure undermines Adversary's. That is, Adversary and Client have the same vulnerability to enemy defense expenditures. Then Client's security level,  $S_3$ , can similarly be written as

(3c) 
$$S_3 = (g_1 + g_3) - \varphi(1 + \mu)g_2,$$

since Hegemon's MIC inflates the parameter associated with Adversary's threat to Client from  $\varphi$  to  $\varphi(1 + \mu)$ . The actual security level of Client is obtained by setting  $\mu = 0$  in (3c).

Again, to minimize the number of parameters, the GDPs of the three entities are here assumed to be equal and normalized to 1. The budget constraints of Adversary and Client are straightforward: the sum of the consumption and the defense expenditures must equal 1. However, Hegemon's military-industrial-complex supplies arms to its allies in Coalition. As a result, a fraction of Client's defense expenditures augments the budget of Hegemon by the amount of profit earned from these sales. Let the parameter  $\gamma$  denote the profit earned by Hegemon on a dollar's worth of the defense expenditures of Client. Since  $x_i$  denote the consumption level of country i, the budget constraints,  $BC_i$ , i = 1,2,3, of the three players in the model may be written:

(4a) 
$$BC_1$$
:  $x_1 + g_1 = 1 + \gamma g_3$ 

(4b) 
$$BC_2$$
:  $x_2 + g_2 = 1$ 

(4c) 
$$BC_3$$
:  $x_3 + g_3 = 1$ 

I assume Nash behavior on the part of the three players in making their choices. One might ask why cooperation between the members in Coalition is not more appropriate. This might be so if there were perfect agreement between the members. In reality, we would expect moral hazard among members of Coalition to show different degrees of willingness to spend on their joint defense. In NATO, for example, there is considerable foot-dragging on defense expenditures (see

Testoni (2020) for a brief overview of the internal issues facing NATO). Under Nash conjectures, the government of country i, i = 1,2,3 will take as given the choices of other countries and maximize its welfare function,  $W_i$ :

(5) 
$$max_{g_i,x_i} W_i \equiv (x_i)^{\alpha} (S_i)^{\beta} subject to BC_i,$$

where, depending on the index i,  $S_i$  is one of (3a) – (3c) and the budget constraint  $BC_i$  is given by one of (4a) – (4c).

Instead of maximizing the objective function in (5), we could maximize its logarithm, which is a monotonic transformation of the former. Substituting out for  $x_i$  in the objective function by using the budget constraint, we are left with maximization with respect to the single variable,  $g_i$ . The first order conditions for Hegemon, Adversary, and Client, respectively, can be easily shown to reduce to<sup>7</sup>

(6a) 
$$\beta(1 + \gamma g_3 - g_1) - \alpha(g_1 + g_3 - \theta(1 + \mu)g_2) = 0,$$

(6b) 
$$\beta(1-g_2) - \alpha(g_2 - \varphi(g_1 + g_3)) = 0,$$

(6c) 
$$\beta(1-g_3) - \alpha(g_1 + g_3 - \varphi(1+\mu)g_2) = 0.$$

The left hand sides of (6a) - (6c) are proportional to the marginal net benefits to the respective country from increasing its defense expenditure by a dollar. Note from (6b) that Adversary's marginal net benefit to its own defense expenditures increases in the defense expenditures of its rival(s). That is, the defense expenditures of rivals are strategic complements of its own [Bulow, Geanakoplos, and Klemperer (1985)]; so higher defense expenditures by Coalition increases the marginal worth of Adversary's defense expenditures and thus would elicit a higher expenditure from Adversary. From (6c) we see that the marginal net benefit of Client declines in the defense expenditures of it ally, Hegemon, giving Client an incentive to free-ride off Hegemon and reduce its own defense expenditures. This captures the moral hazard arising from the public good nature of joint-defense within Coalition. From (6a) we that the situation is a bit more nuanced in the

<sup>&</sup>lt;sup>6</sup> In 2023, only about a third of the 32 NATO members met or exceeded the agreed-upon commitment 2% of GDP on defense, <a href="https://www.visualcapitalist.com/which-countries-meet-natos-spending-target/">https://www.visualcapitalist.com/which-countries-meet-natos-spending-target/</a>

<sup>&</sup>lt;sup>7</sup> I assume that the neither member of Coalition opts for zero defense expenditures, a distracting possibility that arises when they both contribute to a public good (joint defense). It is reasonable to assume away such scenarios of extreme moral hazard because that would render the coalition infeasible.

<sup>&</sup>lt;sup>8</sup> It is readily verified that the second order sufficient conditions for individual maximization are satisfied.

case of Hegemon. Adversary's defense expenditure is a strategic complement to Hegemon's, implying a symmetry in the strategic relationships between the defense expenditures of Adversary and Hegemon . However, the defense expenditures of Hegemon's ally, Client, are a strategic substitute to Hegemon's if  $\beta \gamma < \alpha$  and a strategic complement if  $\beta \gamma > \alpha$ . That is, if Client's defense expenditures were to rise, that of Hegemon would fall if  $\beta \gamma < \alpha$  and rise if  $\beta \gamma > \alpha$ . Recall that  $\gamma$  is the profit to Hegemon's MIC from a dollar's worth of Client's defense expenditure. When this is sufficiently large  $(\gamma > \alpha/\beta)$ , an increase in Client's defense expenditure elicits a higher defense expenditure from Hegemon because profits from its sale of arms to Client augments Hegemon's resources and so the Hegemon can devote more to defense expenditures. When the profit is small  $(\gamma < \alpha/\beta)$ , however, Hegemon reduces its defense expenditure when Client increases its. This is because an increase in Client's defense expenditure provides more security not only to itself but also to Hegemon (and vice versa). This is certainly the case when the Hegemon earns no profits from the sale of weapons to Client (that is,  $\gamma = 0$ ), reiterating the moral hazard inherent in joint defense.

This system of linear equations (6a) - (6c) can be solved to obtain the Nash equilibrium in defense expenditures. Recognizing that this solution depends on the exogenous parameters, it is denoted by  $\{g_1^*(\theta, \varphi, \mu), g_2^*(\theta, \varphi, \mu), g_3^*(\theta, \varphi, \mu)\}$ , where only the important parameters are included as arguments for brevity. We can retrieve the respective consumption levels,  $\{x_1^*(\theta, \varphi, \mu), x_2^*(\theta, \varphi, \mu), x_3^*(\theta, \varphi, \mu)\}$ . in the Nash equilibrium from the budget constraints. The solution and the proofs of the Propositions are given in the Appendix.

# 2.1 The Effects of Threat Inflation

From the solution, we obtain the following result.

Proposition 1: An increase in threat inflation by Hegemon's military industrial complex (that is, an increase in  $\mu$ ), in the Nash equilibrium

- (a) increases the defense expenditures of Adversary,
- (b) increases the defense expenditures of Hegemon if  $\varphi/\theta < (\alpha + \beta)/(\alpha \beta \gamma)$ , and decreases it if  $\varphi/\theta > (\alpha + \beta)/(\alpha \beta \gamma)$ ,
- (c) increases the defense expenditures of Client if  $\varphi/\theta > \alpha/(\alpha + \beta)$ , and decreases it if  $\varphi/\theta < \alpha/(\alpha + \beta)$ ,

(d) and increases the aggregate defense expenditures of Coalition.

The influence of the MIC of Hegemon increases the defense expenditures of Coalition in equilibrium, as seen in part (d) of this proposition. Despite the fact that Adversary does not entertain an exaggerated threat from Coalition, part (a) of the above proposition says that its defense expenditures increase. This arises as a defensive measure: the more aggressive posture of Coalition lowers Adversary's security level and it is forced to bolster its defenses. Parts (b) and (c) are a bit subtler and arise from the strategic interactions between the allies in Coalition. Part (b) says that Hegemon's defense expenditures rise only if the threat it faces ( $\theta$ ) from Adversary is a sufficiently large relative to the threat faced by Client ( $\varphi$ ), and decreases if it is not. This is because, when Hegemon's military industrial complex inflates the external threat to Coalition, if  $\theta$  is sufficiently large compared to  $\varphi$  it is more important for Hegemon to increase its defense expenditures than it is for Client. In fact, Client may free-ride off Hegemon and decrease its defense expenditures. Part (c) says that when  $\varphi$  is sufficiently large relative to  $\theta$ , Client will increase its defense expenditures. Hegemon may free-ride off Client and actually lower its defense expenditures.

Figure 1 illustrates when Hegemon and Client increase or decrease their defense expenditures in response to an increase in MIC's threat inflation. We may think of the ratio  $\varphi/\theta$  as the relative threat faced by Client compared to Hegemon. This ratio is shown along the horizontal line shown in Fig. 1. The point A corresponds to the threat ratio of  $\alpha/(\alpha+\beta)$  and point B corresponds to the ratio of  $(\alpha+\beta)/(\alpha-\beta\gamma)$ . It is only when the threat ratio falls between A and B that both members of Coalition increase their defense expenditures in response to greater threat inflation.

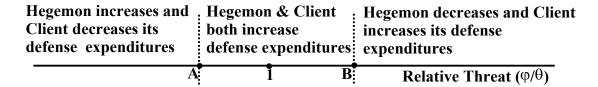


Figure 1: Illustrates Hegemon's and Client's Response to rising MIC's Influence

Part (d) assures us that, despite the fact that one of the two (but never both) members of Coalition may decrease their defense expenditures when threat inflation rises, the aggregate

defense expenditures of Coalition necessarily increase. This is not surprising since, after all, the MIC is initiating the increase in defense expenditures by exaggerating the threat from Adversary. The import of the above proposition is that threat inflation by Hegemon, in the Nash equilibrium, elicits an increase in Adversary's expenditures to protect itself from Coalition's build-up of defenses, as seen in part (a) of the above proposition. As a result, the total expenditure of all players in this scenario always increases in response to the threat inflation by Hegemon's military-industrial complex.

Since resources in Coalition get misallocated towards defense at the expense of consumption when  $\mu > 0$ , this misallocation is perforce inflicted on all players. We would expect, then, that this misallocation should decrease the welfare of Hegemon and other players when  $\mu$  increases. An investigation of this reveals that the truth is more nuanced. Let the welfares of Hegemon, Adversary, and Client in the Nash equilibrium be denoted, respectively, by  $W_i^*(\theta, \varphi, \mu)$ ), i = 1,2,3. These welfare functions are to be evaluated at the *true*, not inflated, values of the threat parameters  $\theta$ ,  $\varphi$ . The true security level of player i in the Nash equilibrium, denoted by  $S_i^*(\theta, \varphi, \mu)$ . These are given, respectively, by

(7a) 
$$S_1^*(\theta, \varphi, \mu) = g_1^*(\theta, \varphi, \mu) + g_3^*(\theta, \varphi, \mu) - \theta g_2^*(\theta, \varphi, \mu),$$

(7b) 
$$S_2^*(\theta, \varphi, \mu) = g_2^*(\theta, \varphi, \mu) - \varphi(g_1^*(\theta, \varphi, \mu) + g_3^*(\theta, \varphi, \mu)),$$

(7c) 
$$S_3^*(\theta, \varphi, \mu) = g_1^*(\theta, \varphi, \mu) + g_3^*(\theta, \varphi, \mu) - \varphi g_2^*(\theta, \varphi, \mu).$$

Since the logarithm is a monotonic transformation, we can examine the behavior of  $logW_i^*(\theta, \varphi, \mu)$ ). Thus, for Hegemon we may write

(8) 
$$logW_1^*(\theta,\varphi,\mu)) = \alpha \log(1 + \gamma g_3^*(\theta,\varphi,\mu) - g_1^*(\theta,\varphi,\mu))$$
$$+\beta log(g_1^*(\theta,\varphi,\mu) + g_3^*(\theta,\varphi,\mu) - \theta g_2^*(\theta,\varphi,\mu)).$$

To investigate how, starting from the true context, the introduction of threat inflation affects Hegemon's welfare, we take the derivative of (8) with respect to  $\mu$ , invoke the Envelope Theorem, and evaluate the result at  $\mu = 0$ . We obtain

$$\frac{d}{d\mu} \log W_1^*(\theta,\varphi,0)) = \frac{\beta}{g_1^*(\theta,\varphi,\mu) + g_3^*(\theta,\varphi,\mu) - \theta g_2^*(\theta,\varphi,\mu)} \left(\frac{dg_3^*}{d\mu} - \theta \frac{dg_2^*}{d\mu}\right),$$

so that

(9a) 
$$sign\left(\frac{d}{d\mu}logW_1^*(\theta,\varphi,0)\right) = sign\left(\frac{dg_3^*}{d\mu} - \theta \frac{dg_2^*}{d\mu}\right).$$

We know from part (a) of Proposition 1 that the derivative in the second term in the brackets on the right-hand side of (9a),  $\frac{dg_2^*}{d\mu}$ , is always positive. However, the derivative of the first term, by part (c) of the same proposition, is ambiguous in sign. If the latter is negative, the welfare of Hegemon is unambiguously lower with threat inflation; in general, however, the change in Hegemon's welfare is ambiguous. When Hegemon's welfare declines with threat inflation, it means the general wellbeing of citizens is undermined for the benefit of vested interests associated with the military industrial complex and the politicians who benefit from it.

However, the opposite, and a somewhat surprising, outcome is possible. Note, on consulting Proposition 1 (c) and Figure 1, that Client's defense expenditure increases with  $\mu$  when  $\varphi$  is relatively large compared to  $\theta$ , that is when Client is exposed to a relatively greater threat level than is Hegemon. In this case, the first term in the brackets on the right-hand side of (8) could overwhelm the second term and the net outcome may be positive. In this scenario, Hegemon benefits from threat inflation. Within the alliance Coalition, Client is certainly more exposed to threat than is Hegemon because the latter is protected by greater distance from Adversary. In the light of this, we are likely to obtain the result that Hegemon's welfare actually *increases* when it resorts to threat inflation. The reason is that, when  $\varphi$  is relatively large compared to  $\theta$ , Client increases its defense expenditures dramatically when the threats are inflated. This allows Hegemon to free-ride off Client and to divert some resources to domestic consumption, and also to benefit from the profits from arms sales. In other words, Hegemon benefits at the expense of its ally within Coalition. Alternatively, threat inflation can reduce Client's free-riding off Hegemon. To show that this outcome is not merely a theoretical curiosum at  $\mu = 0$ , I present some simulations of the model that reveal this outcome.

The above possibility may seem surprising because a distortion of the true facts regarding threats would be expected to result in an overallocation of resources to military expenditures at the expense of domestic consumption. Optimal allocation of resources, we might think, requires us to honor the reality in order to avoid wastage. However, this logic does not hold when strategic considerations are involved, as is well-known in the game-theoretic literature.

Mimicking the steps that led to (9a), we obtain the effect of threat inflation on Adversary's welfare:

(9b) 
$$sign\left(\frac{d}{d\mu}logW_2^*(\theta,\varphi,0)\right) = -sign\left(\frac{d(g_1^*+g_3^*)}{d\mu}\right).$$

By part (d) of Proposition 1, the derivative within brackets on the right-hand side is positive, and so Adversary's welfare unambiguously declines with Hegemon's threat inflation. This may be construed as a formal vindication of the "bait and bleed" policy of a hegemon [Mearsheimer (2014a)].

In a similar manner, we obtain the effect of threat inflation on Client's welfare:

(9c) 
$$sign\left(\frac{d}{d\mu}logW_3^*(\theta,\varphi,0)\right) = sign\left(\frac{dg_1^*}{d\mu} - \theta \frac{dg_2^*}{d\mu}\right).$$

The derivative in second term within the brackets on the right-hand side is positive by part (a) of Proposition 1. If the first term is negative, which from Proposition 1 (b) and Figure 1 happens when  $\varphi$  is relatively large compared to  $\theta$ , the welfare of Client unambiguously declines. This, as we have just seen above, is also when Hegemon is likely to benefit from threat inflation. However, when the first term on the right-hand side is positive and more than offsets the second term, Client's welfare would increase. But it is unlikely because this outcome would only arise when  $\theta$  is relatively large compared to  $\varphi$ , that is, when the Hegemon faces a greater threat than Client—an unrealistic scenario if Hegemon is protected by distance from Adversary..

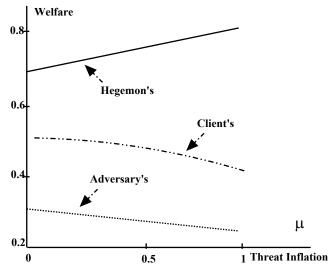


Figure 2: Welfare as a function of Hegemon's threat inflation.

Figure 2 shows the equilibrium welfare levels achieved as a function of Hegemon's threat inflation. (Parameter values are:  $\alpha=0.5$ ,  $\beta=0.5$ ,  $\gamma=0$ ,  $\theta=0.2$ ,  $\varphi=0.5$ .) In the Figure, the threat inflation  $\mu$  is increased from 0 to 1. When  $\mu=1$ , the threat parameters  $\theta$  and  $\varphi$  are perceived to be twice as large as they are in reality. We see that Adversary's welfare monotonically declines in threat inflation,  $\mu$ . More to the point here, Hegemon's welfare increases in  $\mu$ , while Client's decreases. This is because the exposure to threat is greater for Client than it is for Hegemon ( $\varphi=0.5$  whereas  $\theta=0.2$ ). Hegemon benefits at the expense of its ally in Coalition. And this happens despite the fact that, in this simulation, Hegemon is assumed not to profit from the sales of arms to its ally ( $\gamma=0$ ). Hegemon simply free-rides off the greater defense expenditures of Client because their mutual defense is a public good.

The analysis above assumes that the threat inflation in the hegemon is not easily reversible; that it is a commitment in the game-theoretic sense so that it is credible [Schelling (1960)]. In other words, it is really in the interest of Hegemon to continue taking its stand on threat inflation. Otherwise, Adversary and Client have no reason to believe Hegemon and would respond to the true, not inflated, values of  $\theta$  and  $\varphi$ . There is strong evidence to support the assumption that this position in Hegemon is a commitment. In the United States, for example, threat inflation is the result of many organizations with strong vested interests. In fact, these interests are so entrenched and the interlinkage between them is so well-established that even the president is powerless to thwart their recommendations [Friedman (2020)]. This issue will be discussed in more detail in Section 3.

### 2.2 The Effects of Threat Escalation

Hegemon also has an incentive to create disruptions and trouble for Adversary through such means as covert operations, funding of internal opponents of Adversary's government, supplying of arms for a proxy war, etc. [Best, Jr. (1996)]. It can also seek to recruit the Adversary's neighbors into its ambit and increasing the existential threat to Adversary. Let us consider what happens when Hegemon stirs up instability in Coalition's interactions with Adversary. This would certainly increase the value of the threat parameter  $\varphi$ , which captures the threat to Client

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<sup>&</sup>lt;sup>9</sup> Anticipating Section 3, examples of this drawn from Eastern Europe may be NATO's involvement in the color revolutions in Yugoslavia, Ukraine, Georgia, and Kyrgyzstan.

from Adversary and vice versa. But it could also conceivably increase the threat  $\theta$  for Hegemon, which may have military bases across the world that could be attacked. As a result of this deliberate increase in instability, suppose both  $\theta$  and  $\varphi$  get scaled up by a factor  $\sigma \ge 1$ , assumed to be the same for both  $\theta$  and  $\varphi$ . I refer to this scenario as *threat escalation*.

How do the equilibrium defense expenditures and the welfares of the players change as a result of threat escalation? It might appear that this exercise of threat escalation is the same that of threat inflation, where these parameters are both inflated by the factor  $(1 + \mu)$ . However, this is not so. In the case of threat inflation, the threat parameters perceived by the members of Coalition (but not Adversary) were inflated by the MIC while the true parameters remain at  $\theta$  and  $\varphi$ , and the equilibrium welfares were evaluated at these true values. In the present case of threat escalation, the original values of  $\theta$  and  $\varphi$  are changed to  $\sigma\theta$  and  $\sigma\varphi$ , respectively, across the board—that is, not just for Coalition but also for Adversary.

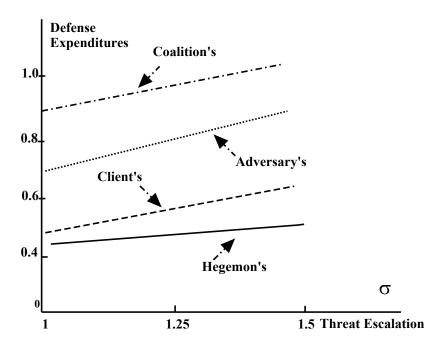


Figure 3(a): Defense Expenditures as a function of scaled Instability across the board via threat escalation.

The analytics for this case, while conceptually simple, yield expressions that are not easy to penetrate. I show some simulation results. Figure 3 (a) shows equilibrium defense expenditures as a function of the threat escalation parameter,  $\sigma$ . (Parameter values are:  $\alpha = 0.5$ ,  $\beta = 0.5$ ,  $\gamma = 0.4$ ,  $\theta = 0.2$ ,  $\varphi = 0.5$ ,  $\mu = 0$ ). Here  $\mu$  has been set to zero in order to isolate the effect of threat

escalation without adulteration from threat inflation. We see for the Figure that, as  $\sigma$  increases, all defense expenditures increase. But it increases least for Hegemon because the threat it faces is much lower than that facing Adversary and Client. Even this increase in Hegemon's defense expenditure is partly because it earns considerable profits from the sale of weapons to Client ( $\gamma = 0.4$ ), and the increased income facilitates an expansion of Hegemon's defense expenditures.

Figure 3 (b) displays the equilibrium welfares of Hegemon, Adversary, and Client for the same parameter values as in Figure 3 (a). We see from Fig. 3(b) that threat escalation here leads to a decline in the welfares of Adversary and Client, but actually increases the welfare of Hegemon. Despite its increased defense expenditures, Hegemon's welfare increases because of the profits from its arms sales to Client, which dramatically increases its defense expenditures because of the greater danger it faces, relative to Hegemon, from Adversary.

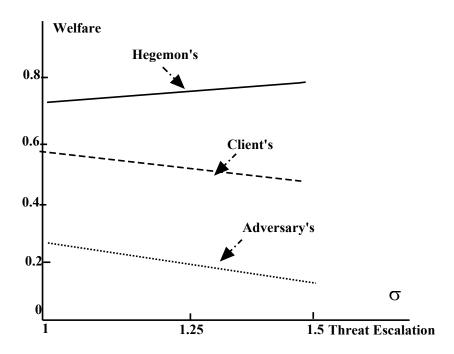


Figure 3(b): Welfare as a function of scaled instability across the board via threat escalation.

It is interesting to inquire how threat escalation affects the security levels, given by (3a) –(3c), evaluated in the Nash equilibrium by the three entities in the model. Again, since the analytics are rather impervious to clean analysis, simulation results are more informative of possibilities. For the same parameter values as in Figure 3(b), the equilibrium security levels qualitatively mimic the welfares in Fig. 3 (b) and so are not shown: Hegemon achieves greater security when

 $\sigma$  increases, while both Client and Adversary experience a decline in security with threat escalation. Because  $\varphi > \theta$ , scaling up of the threats increases Client's defense expenditure by more than Hegemon's, and the latter benefits. Hegemon does achieve greater security in equilibrium through escalation, but at the cost of its ally's security and its perceived enemy's. Since security is the goal of nations in political realism, this shows that Hegemon benefits from fomenting instability elsewhere especially when it is itself protected in large measure by greater geographical distance from Adversary.

## 2.3 Threat Phenomena and the Probability of Winning an Unanticipated War

The analysis here does not formally model actual combat because that is not contemplated by Coalition and by Adversary. Nevertheless, even when there is only a build-up of defenses, a conflict may arise due any one of myriad unforeseen events arising from sheer accidents [De Luce et al (2017)], including misperceptions or miscalculations on the part of one or more parties to the conflict [Jervis (1988)]. Arms build-up is more likely to result in conflict when it involves rivals as opposed to non-rivals [Colaresi and Thompson (2002)]. There are numerous examples of this. A canonical example is the First World War, which arose out of the assassination of a single individual (Archduke Franz Ferdinand of the Austria-Hungarian empire), after which the events spun out of control to end up in the Great War. This happened in the context of rising arms build-up, fueled by rivalry and suspicion.

We may ask how threat escalation would affect the probability of each side winning in the event that an unanticipated combat becomes inevitable. A very important qualifier on the analysis here is that the unanticipated war is one using only conventional arms and *does not escalate to a nuclear war*, in which case there are obviously no winners. To attempt to answer this question, we may invoke the simple model of Tullock (1972), which is widely used in the literature on conflict. The probability, denoted by  $P(\theta, \varphi, \mu)$ , that Coalition would win in the event of a war with Adversary is given in this model by Coalition's Nash equilibrium defense expenditures as a proportion of total defense expenditures of Hegemon, Adversary, and Client. That is,

human error during the October 1962 Cuban Missile Crisis. On the possibility of unintended mass killing in this age of AI-enabled weapons, see the report of Klare (2023).

<sup>10</sup> In the preface to his book on John F. Kennedy, Sachs (2013) recounts a very close call of a nuclear war due to

(10) 
$$P(\theta, \varphi, \mu) = \frac{g_1^*(\theta, \varphi, \mu) + g_3^*(\theta, \varphi, \mu)}{g_1^*(\theta, \varphi, \mu) + g_2^*(\theta, \varphi, \mu) + g_3^*(\theta, \varphi, \mu)}.$$

The probability that Adversary will win is given by  $1 - P(\theta, \varphi, \mu)$ . In threat escalation, we replace  $\theta$  by  $\sigma\theta$  and  $\varphi$  by  $\sigma\varphi$ . Since we are interested in threat escalation for now, I set  $\mu = 0$  here.

We have the following result, which is proved in the Appendix.

*Proposition 2: When*  $\mu = 0$ , an increase in threat escalation,  $\sigma$ ,

- (a) reduces the probability of Coalition winning an unanticipated war when  $\varphi > \theta$ ,
- (b) increases Coalition's probability of winning an unanticipated war when Hegemon faces far greater insecurity than the other players  $(\theta \gg \varphi)$ .

Part (a) is a surprising result. When  $\varphi$  is scaled up, both Adversary and Client perceive greater instability and they both raise their defense expenditures. Since  $\varphi > \theta$ , the increase in Hegemon's defense expenditures does not match those of Adversary and Client; in fact, it might even decrease. However,  $\sigma$  scales up  $\theta$ , too, by the same factor and, so, Hegemon will increase its expenditures on this account while Client's will not increase to the same extent on this account. With threat escalation, on balance the increase in Coalition's aggregate defense expenditures does not proportionately match the increase in Adversary's. Though the absolute magnitude of Coalition's defense expenses will be higher (because Coalition's income is twice that of Adversary), Coalition's proportional increase is smaller than Adversary's increase. Thus, Coalition's probability of successfully winning the unanticipated war declines. This result essentially arises because of the problem of free-riding among the members of Coalition. Each partner is protected more by an increase in its ally's defense expenditures and so is motivated to free-ride with regard to its own increase.

However, when Hegemon faces far greater insecurity than the two other players  $(\theta \gg \varphi)$ , it has more at stake than its ally in Coalition, and so will increase its defense expenditures considerably. But Adversary will not increase its defense expenditures commensurately because  $\varphi$  is small relative to  $\theta$ . Therefore, the probability that Coalition will win the unanticipated war will increase, as indicated by part (b) of the above proposition.

It is interesting to compare these effects escalation with those of threat inflation. In the following proposition, we set  $\sigma = 1$  (no threat escalation) and examine the effect of increasing  $\mu$ .

Proposition 3: When  $\sigma = 1$ , an increase in threat inflation,  $\mu$ , increases the probability of Coalition winning an unanticipated war

The unambiguous result in Proposition 3 arises from the fact that Coalition builds up defenses in excess of what are warranted by the actual threats. Even though Adversary, too, increases its defense expenditures as a response, it evaluates the threats at the true, uninflated levels. As a result, Coalition would have a higher probability of winning an unexpected war. The cost of this "benefit" to Coalition is the reduced consumption that, in turn, would reduce welfare because the defense expenditures are excessive. But even there, Hegemon's welfare may increase at the expense of Client's, as we have already seen. In any case, Adversary's welfare will always be lower. Propositions 2 and 3 suggest that between threat inflation and threat escalation, the former may be better for Coalition. Escalation by covert means may not end up being in Coalition's self-interest, in the light of part (a) of Proposition 2. Even if the costs of covert and other destabilizing operations are minor, the cost of the consequences to Coalition players can be exorbitant.

### 3. Application of the Model to the Ukraine-Russia Crisis and War

In this section, I examine the current Ukraine-Russia war in the light of the results in previous section. Here, we may interpret Hegemon as the United States, Client as the European Union countries, Coalition as NATO, and Adversary as Russia. I first discuss the events that led to the conflict, then paint a picture with a broad brush of the effects of the war on the EU countries, and finally offer reasons for why a negotiated settlement has not taken place, either before the war began or in the two-and-a-half years since.

## 3.1 A Very Brief History of Events Leading to the Ukraine-Russia War

In this subsection, I outline the history of the events that have led to the current war between Russia and Ukraine. The particular focus will be on the role played by NATO and, more specifically, by the United States.

The sequence of relevant events has been carefully and documented by several scholars [Griffin (2023), Sauer (2017), Layne and Schwarz (2023)]. The origins of the current war go back to events that occurred more than three decades ago, beginning with the fall of the Berlin Wall in 1989 and the reunification of Germany. In the negotiations for this reunification, the United States pressed for the unified Germany's membership in NATO. The Soviet Union was naturally very apprehensive of this because East Germany was communist. The Soviet Union wanted either NATO and the Warsaw Pact to be both dissolved or that the unified Germany belong to both NATO and the Warsaw Pact. The United States, under the leadership of President George H.W. Bush, gave repeated verbal assurances that NATO would not expand "one inch" eastward and assured the Soviets that German membership in NATO would not be exploited [Layne and Schwarz (2023)]. Through this expedient, the politically powerful and economically advanced Germany was brought under the domain of control of the United States. While no explicit treaty was written that forbade NATO's expansion eastward, there is enough evidence to suggest that these assurances were given to the Soviets [Diesen (2024)]. Subsequently, after the collapse of the Soviet Union in 1991, the United States exhibited either no awareness of the security concerns of the Russians or willfully chose to ignore them. From the point of view of Russia, which had experienced invasion by Napoleon and by Germany through Ukraine as the corridor, any NATO expansion eastward would have constituted a substantial increase in threat escalation.

Premier Gorbachev's ambitious attempts at reforms fostering openness (*glasnost*) and restructuring (*perestroika*) in the Soviet Union actually ended up weakening the state by the end of the decade of the eighties. By December 1991, the Soviet Union got dismantled, largely due to internal problems. Gorbachev counted on and requested financial aid from the West to surmount the difficulties, but little aid was offered and what was forthcoming came only after the Soviet Union had collapsed [Negroponte (2016)]. This stark fact revealed that, contrary to claims that the United States wanted to facilitate peace and security in Europe, it actually helped hasten the demise of the Soviet Union.<sup>11</sup>

Gorbachev sought to have Russia included in a pan-European security system but retaining its socialist society. The Helsinki Accord of 1975, the Charter of Paris of 1990, and the

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<sup>&</sup>lt;sup>11</sup> In an evaluation of Gorbachev's life and accomplishments, the American historian Suny (2022) says, "Pentagon strategy memo stated that the aim of the United States was 'to ensure that no rival superpower is allowed to emerge."

Organization for Security and Cooperation in Europe (OSCE) of 1994 were serious measures undertaken by European countries to commit to such a pan-European security system. But these were sidelined by the United States, which saw NATO as the most expedient means to control the EU and to isolate Russia. <sup>12</sup> This directly contradicts the liberal view of benign NATO expansion—that its goal was to spread peace and prosperity through negotiations.

The collapse of the Soviet Union should logically have eliminated any role for NATO, the *raison d'etre* of which was the protection of Europe against possible Soviet aggression. However, consistent with Mearsheimer's (2014a) theory of offensive realism, as the solitary hegemon left standing, the United States sought to consolidate its hegemony and expand its sphere of influence into Eastern Europe by encroaching on what was traditionally the former Soviet Union's. The policies of the United States led to its repudiation of several treaties that curtailed the arms race. The Anti-Ballistic Missile Treaty of signed in 1972, the Intermediate-Range Nuclear Forces Treaty signed in 1987, and the Open Skies Treaty signed in 1992, were all casualties of American belligerence after becoming the unipolar hegemon [Diesen (2024)]. The threat escalation these implied for Russia are too obvious to warrant elaboration.

Starting from the mid-1990s, President Clinton started NATO expansion into Eastern Europe, a trend that has continued to this day. The unilateral decision to bomb Serbia without the approval of the UN Security Council was a display of the U.S.'s power as the sole hegemon at the end of the Cold War. This was particularly disconcerting to Russia because it had a long had a strong relationship with Serbia. Later in the decade, Clinton started inducting East European countries into NATO, in violation of the assurances given to Gorbachev in 1991 that NATO would not expand eastward. By 1999, Poland, the Czech Republic, and Hungary were inducted into NATO. In the next decade, NATO absorbed many more countries from Eastern Europe. These events escalated the threat to Russia and initiated a period of increasing hostility between the West and Russia because the inducted countries were all part of the Warsaw Pact. In general, it has been observed that after the Cold-war, Russia was treated not as an equal like Germany was after the First World War. Numerous foreign policy experts in the U.S. warned Clinton of the dangers of

<sup>&</sup>lt;sup>12</sup> Details are provided in an insightful book by Diesen (2024).

<sup>&</sup>lt;sup>13</sup> The Treaty of Versailles in 1919 pinned on Germany the entire blame for the First War and imposed extremely punitive measures on the country. This gave rise to humiliation and resentment in Germany that had serious consequences in the subsequent three decades [Pruitt (2023)].

NATO expansion.<sup>14</sup> Russian data shows a sharp increase in military expenditures (in constant dollars) since 2000.<sup>15</sup> This seems to have occurred after the unilateral bombing by the U.S. and breakup of Yugoslavia. Threat inflation by the hegemon increases the military expenditures of the Adversary, and also the world's aggregate, in accordance with Proposition 1 of the previous section.

These developments have been justified by the West in terms of benign expansion of liberal values—emphasizing freedom, institutions, free markets, and democracy. But this ignored the fact that countries are driven primarily by nationalism and national security, as emphasized by the realism theory of international relations [Mearsheimer (2014a)]. Although tensions between the West and Russia were building up since the early 1990s, the current war in Ukraine is an inevitable consequence of what happened in 2008 and in 2014. In NATO's Bucharest meeting of 2008, at the behest of President George W. Bush, NATO announced that Ukraine and Georgia will become its members. This, for the first time, sought to include in NATO countries that were part of the former Soviet Union, not merely formally independent countries that were part of the Warsaw Pact. Given the geographical and cultural proximity of these two countries to Russia, such an announcement was a reckless and provocative move. <sup>16</sup> Given the existential threat that this poses to Russia, President Putin vehemently protested. Russia's 5-day war with Georgia that followed in 2008 was a clear signal that Russia will not allow Georgia and Ukraine to become NATO members.

Threat levels to Russia were escalated to even higher levels in 2014. In 2013 Viktor Yanukovych, who was Ukraine's pro-Russian democratically elected President in 2010, turned down a trade offer that would have meant closer association with the EU but distanced it from its trading partner, Russia. He opted for in favor of one offered by Russia that was non-exclusive and would have allowed Ukraine to diversify its trading partners. What followed were "peaceful"

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<sup>&</sup>lt;sup>14</sup> Diesen (2024, p. 134) quotes from the 1997 document containing this warning: "NATO expansion will draw a new line of division between the 'ins' and the 'outs,' foster instability, and ultimately diminish the sense of security of those countries which are not included."

<sup>&</sup>lt;sup>15</sup> See the Stockholm International Peace Research Institute's SIPRI-Milex-data-1948-2023.

<sup>&</sup>lt;sup>16</sup> Ex-CIA analyst Ray McGovern (2022) recalls that, in 2008, the Russian Foreign Minister Sergei Lavrov communicated to the U.S. Ambassador to Russia, William Burns, that including Ukraine and Georgia in NATO is a red line: "*Nyet* means *nyet*." Burns (2008) communicated this to Washington in a telegram; this document, originally classified, is now available courtesy *Wikileaks*.

mass protests in western Ukraine and, ultimately, Yanukovych was deposed in 2014.<sup>17</sup> A pro-Western alternative, Yatsenyuk, was put in his place. This coup was orchestrated by the United States (see Diesen (2024) for the details). <sup>18</sup> NATO was not popular among the Ukrainians, and relying on elections to bring Ukraine into NATO would not have been feasible.

The immediate response of President Putin to these events was to annex Crimea, a province in the south of Ukraine. Crimea was in fact part of Russia in the USSR, but in 1954, Premier Nikita Khrushchev gave it to Ukraine as a gift. Presumably, Putin's motive in annexing Crimea was to ensure that what was originally Russian land did not become a part of NATO. The strategic consideration here was to secure the port Sevastopol and the naval base of Russia that gave it crucial access to the Black Sea. The Russian annexation of Crimea led to the narrative in the West that Putin has territorial ambitions in Europe, a claim that does not appear to be true because it lacks evidence (see Mearsheimer (2024) on this). The core issue, repeatedly emphasized by Russia, is one of security. The annexation of Crimea was a defensive measure against NATO's relentless expansion eastward. <sup>19</sup> The events of 2014 may be legitimately taken to be the beginning of the current Ukraine-Russia war. The facts seem to contradict the repeated claim by western governments and media that Putin's aggression was completely "unprovoked". <sup>20</sup> This claim suggests that either the West was completely innocent of the knowledge of political realism regarding how great powers behave or to a willful

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<sup>&</sup>lt;sup>17</sup> This is the narrative embraced and perpetuated by the West. In reality, the protests turned violent and at least 50 people died because of snipers. Yanukovych's government and the police force were blamed for this violence, and in the backlash that followed the Yanukovych government fell. In a comprehensive investigation of the available evidence (videos, eye witness testimonies, forensics, etc.), Katchanovski (2023) concluded that the snipers did not belong to the government but were neo-Nazis and that the Maidan leaders belonged to a far-right wing party. The Maidan mass killing was staged to oust the Yanukovych government.

<sup>&</sup>lt;sup>18</sup> A leaked phone call between the American Assistant Secretary of State for European and Eurasian Affairs, Victoria Nuland, and the American Ambassador to Ukraine in 2014, Geoffrey Pyatt, reveals the involvement of the U.S. in the *coup*. (This phone call can be heard, with subtitles, at <a href="https://youtu.be/WV9J6sxCs5k">https://youtu.be/WV9J6sxCs5k</a>.) This call, in which Nuland expressed disdain for the EU, contained a discussion on who would be the most appropriate replacement for Yanukovych and it was concluded that it would be Yatsenyuk. The discussion also went into how that could be orchestrated. And this occurred when Yanukovych was the current President of Ukraine. Yatsenyuk did become the prime minister of Ukraine in Feb 2014. See Sakwa (2015, Ch. 4), McGovern (2019), Griffin (2023, Ch. 15), and Deisen (2024, Ch. 7) for details, and also the analysis by Carpenter (2017).

<sup>&</sup>lt;sup>19</sup> President Clinton ignored the opinion given by the Cold War strategist George Kennan, a diplomat with considerable experience in Russian affairs. In his Op-Ed piece in the New York Times, February 5, 1997, Kennan gave a prescient warning that intervention in Ukraine would be a "fateful error".

<sup>20</sup> The *New York Times*, however, published an article on February 25, 2024, "The Spy War: How the C.I.A.

<sup>&</sup>lt;sup>20</sup> The *New York Times*, however, published an article on February 25, 2024, "The Spy War: How the C.I.A. Secretly helps Ukraine Fight Putin," by the investigative reporters Adam Entous and Michael Schwirtz. It gives a detailed description of the arrangement the C.I.A. had with Ukraine going back ten years in which equipment and training were funded and intelligence on Russia exchanged. Some of this aid was used by Ukraine to conduct terrorist activities inside Russia.

misrepresentation of the motive of NATO expansion in the guise of benign liberal motives.<sup>21</sup> Mearsheimer (2014b, 2024), basing his arguments on political realism, places the blame for the Ukrainian crisis squarely at the feet of the West.

The coup that replaced Yanukovych precipitated a civil war in Ukraine. The new government sought to ban the Russian language and suppress Russian culture and the Orthodox Church [Diesen (2024, Ch. 8)]. In April 2014, pro-Russian separatists who were outraged rebelled in the eastern Ukrainian region of Donbas, and seized the provinces of Donesk and Luhansk. The eastern part of Ukraine comprises largely of Russian speaking people and the western regions of Ukrainian speaking. In a few months, as the rebels fought the Ukrainian military, Russian troops overtly entered the fighting in this eastern region. In 2014 and 2015, Germany and France oversaw two agreements involving Ukraine, Russia, and the Organization for Security and Cooperation in Europe (Minsk I and, after it failed, Minsk II) that sought to bring about a ceasefire and establish a security zone. They failed for many reasons, one of which was that these agreements did not represent credible commitments on the part of Ukraine and Russia and so neither country trusted the other to uphold their end of the agreements [D'Anieri (2023)]. But the main reason why they failed is that they did not address the primary concern of Russia that Ukraine not join NATO. There is evidence, however, that the West did not propose the Minsk agreements in good faith with regard to Russia.

The failure of Minsk need not have ultimately led to war, though Russia and Ukraine were edging towards a war after NATO reiterated in June 2021 its 2008 decision to induct Ukraine into it. Even so, Russia made several attempts at negotiations but all of them floundered. In December 2021, two months before the war started, President Putin proposed to NATO and the United States a draft of a treaty with demands pertaining to Russia's security. The main demands were that Ukraine should not become a member of NATO and that there should be no NATO weapons or troops deployed in Ukraine. Had the West engaged in discussion, war may have been

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<sup>&</sup>lt;sup>21</sup> Recall the American belligerent response to the USSR putting missiles in Cuba in 1962. Ukraine shares a 2,100-kilometer border with Russia, along which NATO can place nuclear weapons if Ukraine has NATO membership.

<sup>22</sup> The agreements, it seems, were a ruse. In an interview given to the German publication *Die Zeit* on December 7, 2022, the former Chancellor of Germany, Angela Merkel, admitted that "The 2014 Minsk agreement was an attempt to give Ukraine time...It also used this time to become stronger, as you can see today...", as reported in Schwartz (2022). Merkel also said that she and French President Francois Hollande were aware that the Ukraine-Russia conflict was a "frozen conflict," that is, one where open combat may cease but the underlying issues are not resolved. This suggests that NATO wanted war in Ukraine, not peace, even as the Minsk agreements were being framed.

avoided, but the West did not—most likely because it wanted to escalate the conflict to weaken Russia. When all possibility of negotiation was exhausted, President Putin initiated war on Ukraine by invading on February 24, 2022.<sup>23</sup>

Soon after, however, there were three more attempts to avoid war, chronicled in detail by Snider (2023). These were attempted negotiations between Ukraine and Russia—the first in Belarus, the second mediated by the then-Israeli Prime Minister Naftali Bennett, and the third in Istanbul.<sup>24</sup> All three offered the potential for peace. In the one in Istanbul Ukraine and Russia had actually *reached* a mutually satisfactory agreement but fell short of signing the agreement.<sup>25</sup> This was known to scholars in the U.S. [Hill and Stent (2022)]. All three attempts were in the end blocked by the U.S. and some NATO members. This suggests that a neoliberal theory of a benign hegemon spreading liberal values does not square with the facts. The United States has a vested interest in seeing the Ukraine-Russia war proceed. It is difficult to avoid the inference that the Ukraine-Russia conflict is a proxy war being fought by NATO against Russia in Ukrainian territory.

This brief history of the current situation in Ukraine reveals the persistent increase in Russian insecurity caused by actions of NATO to surrounding Russia by NATO members and isolating it. Within NATO there was increasing threat inflation presumed to come from Russia and outside NATO there was continuous threat escalation.

## 3.2 The Ongoing Consequences of the War for the European Union

The model presented in the previous section is static. To assess the empirical evidence on the economic and welfare consequences that threat inflation and escalation have had in the Ukraine-Russia war, we have to look at the effects, not on GDP but on *growth rates* of GDP. But because

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<sup>&</sup>lt;sup>23</sup> NATO's Secretary General Jens Stoltenberg, perhaps in a faux pas, admitted that Putin was pushed into war by NATO expansion (<a href="https://www.nato.int/cps/en/natohq/opinions\_218172.htm?selectedLocale=en">https://www.nato.int/cps/en/natohq/opinions\_218172.htm?selectedLocale=en</a>). In a speech delivered on September 7, 2023, alluding to the fact that the Ukraine invasion led to Finland and Sweden joining NATO, he said, "This is good for the Nordic countries. It's good for Finland and Sweden. And it's also good for NATO. And it demonstrates that when President Putin invaded a European country to prevent more NATO, he's getting the exact opposite." See also the article by Sachs (2023b) that alludes to the same quote.

<sup>24</sup> Naftali Bennett said in an interview that the U.S., Germany, and France blocked any deal between Ukraine and

<sup>&</sup>lt;sup>24</sup> Naftali Bennett said in an interview that the U.S., Germany, and France blocked any deal between Ukraine and Russia. See <a href="https://youtu.be/O10svZJ2Fps">https://youtu.be/O10svZJ2Fps</a>

<sup>&</sup>lt;sup>25</sup> The ex-British Prime Minister Boris Johnson, on a surprise visit to Kiev on April 9th, 2022, pressured Zelenski to not sign. See "Official: Johnson Forced Kyiv To Refuse Russian Peace Deal," *The European Conservative*, <a href="https://europeanconservative.com/articles/news/official-johnson-forced-kyiv-to-refuse-russian-peace-deal/">https://europeanconservative.com/articles/news/official-johnson-forced-kyiv-to-refuse-russian-peace-deal/</a>

GDP changes for many reasons, we have to examine how the actual growth rates compare with previously predicted growth rates. From any discrepancy between the two, we may form an idea of how much is attributable to the Ukraine-Russia war per se. While there a few sources that are beginning to examine this empirically, fewer still have sought as yet to establish the causal effects from the war to growth rates. Nevertheless, the empirical picture does provide some broad circumstantial evidence on the effects.

There are several avenues through which the current Ukraine-Russia war impinges on the economies of EU countries. <sup>26</sup> A primary route is through energy prices, since Russia supplies a substantial amount of oil and gas to the EU. Ten countries of the EU imported more than 50% of their energy needs from Russia [EIB (2022)]. Higher energy prices feed into consumer goods production and contributes to inflation. Furthermore, food prices in the EU are also higher because Ukraine is one of the largest producers of wheat in the world. Naturally, the effects of higher prices for food and energy will depend on how developed a country is; East European countries have been more effected than west European ones. To the extent that commercial banks own assets in Ukraine and Russia, their decline in value will make commercial lending tight—putting firms already weakened by Covid-19 in jeopardy. Naturally enough, because geographic distance is an important determinant of trade volumes, countries closest to Ukraine and Russia are most badly affected. Government deficits in EU countries will increase for several years into the future due to spending to support the population for higher energy costs, higher defense expenditures, etc. According to EIB (2022), three months after the Russian invasion began in 2022, the real GDP growth in the EU was reduced from 3.9% to 2.7%, a larger decline than estimated for the U.S. and the U.K. Prior to the Russian invasion, the EU growth rate was above that of the U.S. but, subsequently, it has fallen below.

The United States, the EU countries and a few others have imposed punitive sanctions on Russia in a dozen rounds since 2014; Russia is the most sanctioned country in the world. These sanctions of course impinge adversely on Russia, as intended, but they also carry the self-inflicted cost of reduced growth on the sanctioning countries, especially in the EU.<sup>27</sup> The OECD

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<sup>&</sup>lt;sup>26</sup> A survey is given in the European Investment Bank's publication EIB (2022).

<sup>&</sup>lt;sup>27</sup> In a recent paper, Imbs and Pauwels (2024) estimate the effect of trade sanctions to be 15 times smaller on the EU than on Russia. However, the effects of the Ukraine-Russia are seen to vary widely across the EU countries. Furthermore, the sanctions imposed on Russia are far more than just those pertaining to trade.

Economic Outlook Interim Report of 2024 pegs the GDP growth rate of the three largest economies of the EU, Germany, France, and Italy, at 0.3%, 0.6%, and 0.7% respectively. In contrast, the estimated growth rate of Russia is 1.8% and that of the U.S. 2.1% [Table 1, OECD (2024)]. <sup>28</sup>

Particularly disturbing is the effect of the Ukraine-Russia war on the economy of Germany, which is the most powerful economy in the EU in the post-World War II period. Its poor current performance will ultimately spill over to other EU countries and beyond. Germany seems to be deindustrializing. This is partly because energy prices in Germany have been rising after the country implemented regulations to phase out energy from fossil fuels and nuclear plants and to rely on renewable energy. Adding to this is the fact that cheap gas from Russia using Nord Stream 1 pipeline was cut off by Russia as of August 2022. China is a fierce competitor of Germany in manufactured goods. Russia diverting its supply of gas from Germany to China gives China an even greater comparative advantage. As a result, many multinationals are relocating from Germany to the United States. Even Volkswagen, the renowned German automobile company, is considering closing factories in Germany for the first time in 87 years in order to economize on costs. 1

The Nord Stream 1 and 2 pipelines for delivering Russian gas to Europe were blown up on September 22, 2022. The group or states involved in this act of sabotage has not been formally ascertained. Russian submissions to the UN Security Council that it undertake an independent investigation into this act of terrorism has not been taken up.<sup>32</sup> Nevertheless, the American investigative journalist Seymour Hersh identified the perpetrator as the U.S., and the act was

<sup>&</sup>lt;sup>28</sup> This observation leads *Politico* in a recent article of April 29, 2024, to suggest that EU should be reconsidering its sanctions on Russia.

<sup>&</sup>lt;sup>29</sup> See Vinoski "German Deindustrialization Is A Wake-Up Call for U.S. Manufacturers," Feb. 29, 2024, *Forbes*, https://www.forbes.com/sites/jimvinoski/2024/02/29/german-deindustrialization-is-a-wake-up-call-for-us-manufacturers/

<sup>&</sup>lt;sup>30</sup> Economist, "Is Germany Once Again the Sick Man of Europe?", Aug. 17, 2023.

<sup>&</sup>lt;sup>31</sup> "Volkswagen, Seeking to Cut Costs, Considers German Plant Closures," by Melissa Eddy, *New York Times*, September 2, 2024.

<sup>&</sup>lt;sup>32</sup> See <a href="https://apnews.com/article/russia-ukraine-nord-stream-4398a755a2de6c09846362a1038badd8">https://apnews.com/article/russia-ukraine-nord-stream-4398a755a2de6c09846362a1038badd8</a>. Only Brazil, China, and Russia voted in favor of an independent investigation. The remaining 12 members of the UNSC all abstained, ensuring that the proposal did not achieve the minimum required votes for adoption, which is at least 9 votes in favor and no vetoes among the countries with veto power. Significantly, even Germany did not vote for an independent investigation by the UNSC.

accomplished by the C.I.A. using Norwegian help. 3334 Given the credibility of this source, this raises the question: The U.S. wanted to weaken the Russian economy but why would it weaken the economy of Germany, its staunch ally in NATO? There are several possible reasons. By blowing up the pipeline, the sale of Russian gas to Europe would be disrupted—thereby reducing Russia's export revenues while also loosening the Germany-Russia ties in the process. Secondly, the U.S. benefits by having Germany buy American liquefied natural gas at much higher prices. Thirdly, higher energy prices to a formidable manufacturing giant in Europe would eliminate Europe as a competitor of American manufactures.

A fourth and long-standing reason has to do with ensuring that Germany does not team up with Russia in opposing the hegemony of the U.S. after the Soviet Union collapsed. This was an important reason for the U.S. uniting West and East Germany in 1989 and insisting that the united Germany be a part of NATO. Even during the Cold War, the United States was against the availability of cheap Russian gas to European countries [Stent (2014)]. The U.S. has been wary of the industrial clout of Germany in Europe and cheap Russian gas only strengthened it; the U.S. has sought to undermine the mutually beneficial trade between Germany and Russia. It pays the hegemon to have allies with significant international stature but also to ensure that they are not strong enough to oppose it on substantial foreign policy issues [Polyakova and Haddad (2019)]. This is one of the reasons why the U.S. has been tolerant of European allies in NATO not investing enough in their own defense; their dependence gives U.S. the freedom to unilaterally pursue its goals with the willing, or sometimes reluctant, acquiescence of its allies.<sup>35</sup>

Ukraine itself has lost so many soldiers in the war with Russia that it faces an extreme shortage of soldiers; its ammunition has been depleted and the country's infrastructure has been

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<sup>33 &</sup>quot;How America Took Out the Nord Stream Pipeline," by Seymour Hersh, February 8, 2023, https://seymourhersh.substack.com/p/how-america-took-out-the-nord-stream

<sup>&</sup>lt;sup>34</sup> At a press briefing in early February 2022, after meeting with why Chancellor Olaf Scholz of Germany, President Biden said, ""If Russia invades . . . there will be no longer a Nord Stream 2. We will bring an end to it." [Hersh, op. cit.]

This would explain why Chancellor Olaf Scholz of Germany did not so much as protest when Nord Stream 1 and 2 were blown up and quietly went along with the pretense that the perpetrators are unknown. Recently, another story has pointed to amateur Ukrainian divers as the culprits ["A Drunken Evening, a Rented Yacht: The Real Story of the Nord Stream Pipeline Sabotage," by B. Pancevski, *Wall Street Journal*, Aug 14, 2024]. This story stretches credulity and lacks the credibility of Seymour Hersh's investigation. Even if we accept the *WSJ* story, however, given the deep U.S. involvement noted earlier on the Ukrainian side, it seems unlikely to have been executed without U.S. approval.

devastated.<sup>36</sup> Much of its population has left the country, possibly never to return.<sup>37</sup> There is no question that, among the allies in NATO, the countries in the EU have borne the brunt of the effects of the Ukraine-Russia war. Macroeconomic instability, an increasing financial burden due to support needed to offset inflation, dealing with the substantial number of refugees from Ukraine are only a few of the problems confronting these countries.

The caveat in Section 2 that the analysis is based on the presumption that the conflict does not escalate to a nuclear war is relevant here. In the light of the result in Proposition 3, we see that the U.S. has an incentive to engage in threat inflation up to a point just short of a nuclear war in the case of unanticipated events. Recognizing this, Russia's interest is in repeatedly reminding NATO that nuclear war is not ruled out. The U.S. and Russia have nuclear weapons and so are protected by the doctrine of mutual assured destruction. But most EU countries do not have nuclear weapons and are extremely vulnerable. Recent events suggest that the U.S., the EU, and Russia are perilously close to a nuclear war in a dangerous game of chicken in which the winners are mostly the MIC and American political establishment. The cost of the devastation will be borne by the people of Ukraine and the EU as collateral damage.

## 3.3 Why No Negotiated Solution?

The foregoing raises several obvious questions pertaining to the Ukraine-Russia war. Why did the U.S.-led NATO systematically expose Russia to increasing existential insecurity through threat inflation and threat escalation outlined in subsection 3.1? Why did the United States and NATO repeatedly refuse to negotiate with Russia? Why did the NATO members of the EU go along with the policies of the United States and bring matters to such a state when they would be bearing the brunt of the effects of the conflict that seemed imminent?

The answer to the first question is provided by the model in Section 2. For the hegemon (United States), it pays to engage in threat inflation and escalation. The United States benefits from protecting its hegemonic status and also from the sale of weapons to its allies. This is consistent with the theory of offensive realism of Mearsheimer (2014). We clearly saw that it is instability, not stability, that can work to the advantage of a unipolar hegemon. This would explain the

<sup>36</sup> New York Times, "Ukraine's Big Vulnerabilities: Ammunition, Soldiers and Air Defense," by Marc Santora, April 16, 2024.

<sup>&</sup>lt;sup>37</sup> New York Times, "Ukraine War Sets Off Europe's Fastest Migration in Decades," by Patrick Kingsley, March 1, 2022.

record of the United States in fomenting disorder across the world in the three decades since the dismantling of the Soviet Union. According to Congressional Research Service data, between 1991 and 2022, the U.S. has undertaken at least 251 military interventions, showing an acceleration after it became a unipolar hegemon.<sup>38</sup>

The answer to the second question on the absence of negotiated settlements is related to the first. It is to the benefit of the hegemon to continue escalation because the cost to it are small and in fact there can be profit from arms sales as long as its own troops are not in jeopardy. The costs are essentially borne by the ostensible beneficiary of the continuation, namely, Ukraine. Furthermore, the hope of undermining the autonomy of Russia through this proxy war would enhance the U.S.'s unipolar hegemony. The reluctance of a country to yield its hegemonic status is well-known in history since the time of Thucydides in 4<sup>th</sup> century BC. His theory of hegemonic wars is viewed by political scientists to have relevance even today.<sup>39</sup>

A stark difference between the earlier hegemons like the British Empire and the current American Empire is the role of the powerful military industrial complex in the latter. In the present-day context, the MIC profoundly influences this choice of prolonging and escalating conflicts. The MIC has insinuated itself so deeply into the American economy and the political establishment that its preferences are reflected in the foreign policies of the U.S. [Friedman (2020), Heinz and Jung (2021)]. What has transpired in the past few decades was foreseen in a prescient insight of President Eisenhower on the dangers of the military industrial complex and "the rise of misplaced power". 40 There are many avenues through which this "rise of misplaced power" has taken place. 41 These have come with disastrous consequences for the rest of the world because this power has been avidly sought and utilized by the MIC [Hartung and Freeman (2023)].

The arms industry in the U.S. is a highly concentrated, differentiated oligopoly of capitalist firms. As a result, the firms charge the U.S. government much more than the cost of production

<sup>&</sup>lt;sup>39</sup> In his *History of the Peloponnesian War*, Thucydides proposed his famous theory on hegemonic behavior in describing the war in the 5<sup>th</sup> Century BC between ancient Sparta and Athens. His theory was that war results whenever a potential rival comes into prominence to threaten the status quo of the current hegemon. See Gilpin (1988) for the relevance of this theory to contemporary times and also to the nuclear age.

40 https://www.archives.gov/milestone-documents/president-dwight-d-eisenhowers-farewell-address

41 Hartley (2017, Ch 8) offers a good overview.

for the weapons they provide. Furthermore, while lobbying the Pentagon for contracts, their market concentration helps overcome the standard free-riding problem of teams. Firms directly lobby politicians in Congress and the Senate, especially if the representatives are from the same state in which the firms are located. This is because the arms producers provide employment. Particularly targeted for lobbying effort and campaign contributions are members of the House and Senate armed services committees and the defense appropriation subcommittees [Hartung and Freeman (2023)]. Arms producers and contractors elicit favorable consideration from government servants by offering them lucrative jobs after they leave the government. These government servants later become lobbyists for the companies because they can use their contacts and knowledge of governmental procedures [Moosa (2019)].

Think tanks are often funded by the MIC, and the experts of these think tanks are sought by the media for their comments, and expert opinions are taken seriously by the government. They also tend to be taken seriously by the lay populations and so they influence public opinion through the media. Worse, even the media is not impartial; they have ties with organizations that have vested interests in war. <sup>42</sup> This is one reason why Americans tend to believe that U.S. interventions abroad are to perpetuate freedom and democracy even though they often topple democratically elected governments elsewhere. Experts funded by the MIC will likely skew their research so that their recommendations are favorable to the MIC. Freeman (2023) finds that the majority of articles in the media on the issue of U.S. arms and the Ukraine war are funded by companies that profit from the war. There are also employment routes going from think tanks to governments [Moosa (2019, Ch. 6), Hartung and Freeman (2023)]. <sup>43</sup> As a result, the MIC indirectly strongly influences American foreign policy, making it more prone to hawkish attitudes towards countries perceived as enemies. Confrontation with enemies is often chosen in favor of negotiations. Here again, political realists are more in conformity with facts than are political neoliberals.

<sup>&</sup>lt;sup>42</sup> In a recent article, investigative journalist Lee Fang (2024) has shown that, when reporting on the Ukraine-Russia war, even the *New York Times* tends to selectively draw pro-war quotes from people at the think tank Center for Strategic and International Studies (CSIS). The quotes arguing for the U.S. to supply more arms to Ukraine are from the Senior Vice President of CSIS, who doubles as a lobbyist for the defense industry.

<sup>&</sup>lt;sup>43</sup> In the administration of President George W. Bush, for example, the Vice President Dick Cheney, the Defense Secretary Donald Rumsfeld, and the Secretary of State Condoleeza Rice all came from think tanks in Washington (see "What's Behind the 'Think Tanks' That Influence US Policy?" by Nadeem Yaqub, Voice of America, <a href="https://www.voanews.com/a/think-tanks-us-policy/4338913.html">https://www.voanews.com/a/think-tanks-us-policy/4338913.html</a>)

Further escalations of threats to Russia come from remarks regarding regime change in Russia, even the possibility of which is perceived as a significant existential threat (see Griffin (2023) on regime change attempts by the U.S. in Russia). A recent case in point is President Biden's remarks in a speech in Warsaw on March 26, 2022, about a month after Russia's invasion of Ukraine began. He said, referring to President Putin, "[T]his man cannot remain in power". While Biden's administration subsequently sought to walk this remark back, such a comment cannot but be taken seriously. The U.S. has a established historical record on attempted regime changes across the world. 44 Closer to home for Russia, the U.S. participation in the color revolutions in 2003-2005 in Ukraine and Georgia made President Putin very wary of possible U.S. attempts at regime changes in Russia. The seriousness of a steadfast refusal by the U.S. to negotiate before the Ukraine invasion and then for President Biden to let slip remarks of regime change cannot be overestimated from the Russian point of view. This can only lead to an entrenchment in Russia's chosen course of action.

In summary, the MIC setup in the United States is inextricably connected to American foreign policy. As Goodman (2017) put it succinctly: "The arms industry needs a foreign policy that preserves a level of fear and violence around the globe sufficient to sustain trillion-dollar defense budgets" (quoted in Moosa (2019, Ch. 6)). Since the MIC benefits from the production and sale of arms, American foreign policy is arguably less amenable to negotiation. Maintaining and, preferably escalating, threats has been the modus operandi of the American foreign policy since 1991.

This brings us to the third question posed in this subsection: Why did the NATO members of the EU go along with the policies of the United States with regard to Ukraine and bring matters to such a state when they were the ones who would be bearing the brunt of the conflict that seemed imminent? To answer this question, we have to inquire into what the outside option is for EU countries. What if they step out of the U.S.-led NATO alliance and establish their own security system? In terms of the model of Section 2, defense expenditure will no longer be a public good between Hegemon (U.S.) and Client (EU). We would then have three self-defending entities with the following characteristics: Hegemon faces a threat  $\theta$  from Adversary (Russia); Adversary

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<sup>&</sup>lt;sup>44</sup> "The US tried to change other countries' governments 72 times during the Cold War," *Washington Post*, December 23, 2016.

<sup>45</sup> https://inthesetimes.com/article/war-profiteering-aint-physics

facing a threat  $\varphi$  from Hegemon and Client; and Client facing a threat  $\varphi$  from Adversary. The defense expenditures of Client would have to increase, but it would still need to buy some of its weapons from Hegemon. The aggregate spending of Hegemon and Adversary would decline in the Nash equilibrium, but Client's would increase because Hegemon is no longer obliged to defend it. The lower consumption of Client would lower its material wellbeing. <sup>46</sup> The recent European Commission Report (2024) lays out the dire conditions of the EU countries and, among other things, argues for the urgent need for European countries to substantially increase their investment. As can be expected, when there is instability and uncertainty, investment steeply declines, as has been the case in recent years. So, in deciding whether to opt out of the U.S.-led NATO, the EU would have to compare its wellbeing within and outside it. <sup>47</sup> Therefore, there is scope for the U.S. actions to lower the EU's welfare within the current arrangement and still count on the EU members going along.

There is a further reason for the EU members to remain in the NATO alliance. With a track record of getting into at least 251 foreign interventions since 1991, the U.S. has the ability to covertly heighten tensions between Adversary (Russia) and Client (EU), thereby raising the mutual threat level  $\varphi$  between Russia and the EU. Fomenting trouble in Ukraine and Georgia would be examples. This would lower the EU's welfare in the outside option even more. The blowing up of the Nord Stream pipeline was obviously intended to weaken the Russian economy by reducing its exports of gas to Europe. But, by also imposing a very substantial cost on Germany, it probably was also an American warning to Germany that it should not try to seek greater independence from the U.S. in favor of closer ties with Russia.

The post-Cold War historical record shows that, since the early 1990s, the U.S. adopted an evolving policy of "increasing" European security by expanding NATO to include countries that previously belonged to the Warsaw Pact. While there were other security arrangements possible for western Europe, the U.S. rejected them in favor of the U.S.-led NATO as a vehicle because it wished to establish its presence in Europe as a hegemon [van Hooft (2020)]. This has led to the

<sup>&</sup>lt;sup>46</sup> In response to Mr. Trump's menace of removing the U.S. from NATO if the EU did not pull its weight in financial contributions, the EU sought to create their own "European Treaty Organization" (ETO) for their defense. But it could never get off the ground because, among other things, the cost of an estimated \$300 billion that was required was excessive. (See the article in *The Economist*, "What if America Leaves NATO?" July 6, 2024.)
<sup>47</sup> The importance of outside options in the context of UN Security Council voting has been examined by Voeten (2001).

current dependence of EU countries on the U.S. for their defense. What is more, the addition of several smaller eastern European countries undermined the potential collaboration between western European countries. As a consequence, I argue, even relatively strong EU countries like Germany are compelled to passively submit to decisions unilaterally foisted on NATO by the U.S. Negotiations with Russia are repeatedly rejected even as their own economies are adversely affected.

The Ukraine-Russia war may be a good example of the caveats above pertaining to the hazards of NATO escalation. The truth about what is actually transpiring in the war is not easy to discern because of poor reporting—as the well-known saying goes, "Truth is the first casualty of war". The mainstream media in the West has a strong pro-Ukrainian bias in their reporting on the war. Since the time the war began, it has been apparent to independent (American) military experts and ex-CIA analysts who speak up that Russia is inevitably going to defeat Ukraine. Lately, NATO countries are gradually backing out of supporting Ukraine anymore. The escalation seems to be leading to a fiasco for NATO, a legacy of the utter devastation of Ukraine, and the infliction of considerable harm to the EU.

The model of the previous section applied here reveals that the U.S.'s benefit can come at the expense of its allies within NATO, who presumably have to passively see their welfare decline because their outside options are worse. Even so, as seen in Proposition 2, threat escalation can be self-defeating in the event that the escalation leads to an unanticipated war because NATO's aggregate defense expenditures do not rise as fast as Russia's because of moral hazard within NATO. As a result, NATO's probability of winning an unanticipated war declines with threat escalation. The Ukraine-Russia war, which seems at the time of writing to be heading towards an inevitable defeat for NATO and even the mainstream media in the West does seriously not talk of Ukraine victory anymore. This, and the fact that NATO members (like Hungary and Italy) are seeking to opt out of involvement in supporting Europe, may be an illustration of this proposition. The U.S. is recently been backing out of providing more arms to Ukraine like ATACMS.<sup>48</sup>

The denouement towards which the Ukraine-Russia war is heading illustrates the kind of benefit that is lost by a great power losing its unipolar hegemonic status. One of the important benefits

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<sup>48</sup> https://www.cnn.com/2024/08/30/politics/umerov-ukraine-targets-cnntv/index.html

of Ukraine to the United States and the West in general is the access to the rich resources of Ukraine. Apart from minerals, the country has massive amounts of the most fertile land in the world. After the pro-West coup that was orchestrated in 2014, under IMF's insistence, structural changes in the economy were undertaken in exchange for aid. A significant land reform was implemented that created land markets in 2021. As a result, a substantial portion of the 33 million hectares of Ukraine's agricultural land has come under the ownership of western multinationals [Mousseau and Devillers (2023)]. Maintaining and increasing access to Ukraine's resources is very probably a strong motivation contributing significantly to NATO's support for Ukraine and prolonging the Ukraine-Russia war, though this issue is usually unspoken and is rarely brought up in foreign policy discussions. 49

# 4. Concluding Thoughts

With a simple economic model, this paper investigates the behavior of the defense expenditures of a hegemon and its allies in response to their inflation and escalation of the threat from a perceived enemy. It identifies the effects on international stability of the hegemon's military-industrial complex insinuating itself into the hegemon's foreign policy. The model shows that the hegemon has incentives to create instability, as opposed to stability, because it benefits from instability. This upends the traditional belief that the presence of a hegemon creates international stability, which has not been so since the dismantling of the Soviet Union in 1991. Furthermore, the analysis shows that threat escalation by the hegemon may prove counterproductive in that it can reduce the probability of winning an unanticipated war.

The application of this theory to the case of the Ukraine-Russia crisis and war seems to bear out the predictions of the model. Instead of weakening Russia—an explicit goal of the United States,

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<sup>&</sup>lt;sup>49</sup> This aspect received a rare, explicit mention from the senior U.S. Senator, Lindsey Graham, who led a congressional delegation to Ukraine in September, 2024. Earlier, on June 9, 2024, in an interview with CBS, he said, "They're sitting on 10 to \$12 trillion of critical minerals in Ukraine. They could be the richest country in all of Europe. I don't want to give that money and those assets to Putin to share with China. If we help Ukraine now, they can become the best business partner we ever dreamed of, that \$10 to \$12 trillion of critical mineral assets could be used by Ukraine and the West, not given to Putin and China. This is a very big deal how Ukraine ends. Let's help them win a war we can't afford to lose. Let's find a solution to this war. But they're sitting on a gold mine." <a href="https://www.cbsnews.com/news/lindsey-graham-senator-south-carolina-face-the-nation-transcript-06-09-2024/">https://www.cbsnews.com/news/lindsey-graham-senator-south-carolina-face-the-nation-transcript-06-09-2024/</a>

as openly stated by Lloyd Austin, the U.S. Defense Secretary in 2022, <sup>50</sup> it has had the opposite effect of strengthening it. The setbacks that NATO has faced since the beginning of the war in February 2022 reveals that the constant threat inflation and escalation has militarily *strengthened* Russia by raising its existential insecurity. It must be noted that the application of this paper's theory is not restricted to the American conflict with Russia. A similar application could be made for the U.S.- Iran tensions, with America's client states in the Middle East being Saudi Arabia, Israel, Turkey, among others. In South-East Asia, in the looming confrontation between America and China, the client states are Taiwan, Australia, Japan, India, among others.

The role of the military industrial complex of the U.S. especially cannot be overestimated. There is a bias in humans towards hawkishness in conflict scenarios, as the psychologists Kahneman and Renshon (2009) have pointed out. In an earlier paper, Kahneman and Renshon (2007) present evidence that people generally have more optimistic views of their capabilities than is warranted and so they tend to overestimate the probability of their success in wars. Furthermore, they argue that individuals meet with suspicion any concessions offered by a perceived enemy because they tend to magnify their evil intent—making them less prone to negotiating. The compounding effect of these biases, I argue, will be magnified when there is the vested interest of a profit motive at work. Another deep-rooted psychological tendency in humans that has evolutionary underpinnings is the tendency to not let go of sunk costs (see e.g. Eswaran and Neary (2016)). Any errors of judgement are not easily corrected and there is a tendency to continue devoting resources to losing propositions. <sup>51</sup> The current war is a case in point, where repeated rebuffs on the battle ground of NATO-aided Ukraine by Russia are met with escalations in the weapons supplied by NATO rather than resorting to negotiations to wind down the war. <sup>52</sup>

In the light of the logic of economics (and political realism) modeled here and of the historical events outlined, it is hard to disagree with the claim of Mearsheimer (2014b) and Sachs (2023a) that the Ukraine-Russia crisis was provoked by the U.S.; and continues due to the U.S. Theory

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<sup>&</sup>lt;sup>50</sup> Pentagon chief's Russia remarks show shift in US's declared aims in Ukraine", by Julian Borger, *The Guardian*, April 25, 2022.

<sup>&</sup>lt;sup>51</sup>Right at the beginning of his extensive history of CIA's devastating operations around the around, Weiner (2007) indicates that, early in its history, the CIA learned that if it is to be taken seriously by the Presidents, it has to tell them what they like to hear. As a result, the information given is not accurate. In these circumstances, we would not expect errors to be self-correcting. More generally, given the established role of the MIC, we come to sense why dire warnings from scholars and analysts like Sachs (2023c) go unheeded.

<sup>&</sup>lt;sup>52</sup> This may be augmented by political considerations by the current U.S. administration, as some commentators believe, that such postponing the inevitable collapse of Ukraine in the war until after the November 2024 elections.

and evidence both strongly suggest that the justification of NATO's eastward expansion into Europe in terms of neoliberal values such as spreading freedom, markets, and democracy seems to be a cover for the hegemonic ambition of the U.S.

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## **Appendix**

Solving the equations (5a) - (5c), we obtain the Nash equilibrium defense expenditures as

(A1.a) 
$$g_1^*(\theta, \varphi, \mu) = (\beta^2 (1 + \gamma) + \alpha^2 (1 + \mu)(\theta - \varphi)(1 + \varphi) + \alpha \beta (1 + \theta + \theta \mu + \gamma (1 + \varphi + \mu \varphi)))/\Delta_1,$$

(A1.b) 
$$g_2^*(\theta, \varphi, \mu) = (\beta (\beta + \alpha (2 + \gamma) (1 + \varphi)))/\Delta_1$$
,

(A1.c) 
$$g_3^*(\theta, \varphi, \mu) = (\beta^2 - \alpha^2 (1 + \mu) (\theta - \varphi) (1 + \varphi) + \alpha \beta (1 + \varphi + \mu \varphi))/\Delta_1$$

where

(A1.d) 
$$\Delta_1 = (\beta^2 + \alpha \beta (3 + \gamma) - \alpha^2 (-2 + \theta (1 + \mu) \phi + \phi^2 + \mu \phi^2 + \gamma (-1 + (1 + \mu) \phi^2))).$$

Substituting (A1.a) - (A1.c) in the budget constraints (4a) - (4c), we readily obtain the Nash equilibrium consumption expenditures.

Proof of Proposition 1

Taking the partial derivatives of (A1.a) - (A1.c) with respect to  $\mu$ , we obtain

$$(A2.a) \frac{dg_1^*(\theta, \varphi, \mu)}{d\mu} = \alpha(\alpha + \beta) (\beta + \alpha (2 + \gamma)(1 + \phi)) (\alpha (\theta - \phi) + \beta (\theta + \gamma \phi)) / \Delta,$$

(A2.b) 
$$\frac{dg_2^*(\theta,\varphi,\mu)}{d\mu} = \alpha^2 \beta \phi (\theta + \phi + \gamma \phi) (\beta + \alpha (2 + \gamma)(1 + \phi))/\Delta$$
,

$$(A2.c)\frac{dg_3^*(\theta,\varphi,\mu)}{d\mu} = ((\alpha (\alpha + \beta) (\alpha (\phi - \theta) + \beta \phi) (\beta + \alpha (2 + \gamma) (1 + \phi)))/\Delta,$$

$$(A2.d)\frac{d(g_1^*+g_3^*)}{du} = (\alpha \beta (\alpha + \beta) (\theta + \phi + \gamma \phi) (\beta + \alpha (2 + \gamma) (1 + \phi)))/\Delta,$$

where

(A2.e) 
$$\Delta = [\beta^2 + \alpha \beta (3 + \gamma) - \alpha^2 (-2 + \theta (1 + \mu)\phi + \phi^2 + \mu \phi^2 + \gamma (-1 + (1 + \mu)\phi^2))]^2$$
.

Since  $\Delta > 0$ , being a square, and the numerator (A2.b) is positive, part (a) immediately follows.

From (A2.a), it follows that

$$sign\left(\frac{dg_1^*}{d\mu}\right) = sign\left(\alpha\left(\theta - \phi\right) + \beta\left(\theta + \gamma\phi\right)\right),$$

so that

(A3) 
$$sign\left(\frac{dg_1^*}{d\mu}\right) = sign\left(\frac{\alpha+\beta}{\alpha-\beta\gamma} - \frac{\varphi}{\theta}\right),$$

from which part (b) follows.

From (A2.c), we have that

$$sign\left(\frac{dg_3^*}{d\mu}\right) = sign\left(\alpha\left(\phi - \theta\right) + \beta\phi\right),$$

That is,

(A4) 
$$sign\left(\frac{dg_3^*}{d\mu}\right) = sign\left(\frac{\varphi}{\theta} - \frac{\alpha}{\alpha + \beta}\right),$$

From which part (c) follows.

From (A2.d), part (d) follows because both numerator and denominator are positive.

Proof of Proposition 2

When  $\mu = 0$ , the probability in (10) reduces to

$$P(\sigma\theta,\sigma\varphi,0) = \frac{\beta(2+\gamma) + \alpha(2+\gamma+\theta\sigma+\sigma\varphi+\gamma\sigma\varphi)}{\beta(3+\gamma) + \alpha(4+\theta\sigma+3\sigma\varphi+2\gamma(1+\sigma\varphi))}$$

the derivation of which with respect to  $\sigma$  is

(A5) 
$$\frac{d}{d\sigma}P(\sigma\theta,\sigma\varphi,0) = \frac{\alpha(\alpha(2+\gamma)(\theta-\phi)+\beta(\theta-(3+3\gamma+\gamma2)\phi))}{(\beta(3+\gamma)+\alpha(4+\theta\sigma+3\sigma\phi+2\gamma(1+\sigma\phi)))^2}.$$

The denominator of the right-hand side of (A5) is positive, and so

(A6) 
$$sign\left(\frac{d}{d\sigma}P(\sigma\theta,\sigma\varphi,0)\right) = sign\{\alpha(2+\gamma)(\theta-\varphi) + \beta(\theta-(3+3\gamma+\gamma2)\varphi)\}.$$

When  $\varphi > \theta$ , both terms in the curly braces on the right-hand side are negative and so part (a) follows; when  $\theta \gg \varphi$ , both terms are positive and so part (b) follows.

Proof of Proposition 3

When  $\sigma = 1$ , (10) reduces to

$$P(\theta, \varphi, \mu) = \frac{\beta(2+\gamma) + \alpha(2+\theta+\theta\mu+\varphi+\mu\varphi+\gamma(1+\varphi+\mu\varphi))}{\beta(3+\gamma) + \alpha(4+\theta+\theta\mu+3\varphi+\mu\varphi+\gamma(2+(2+\mu)\varphi))'}$$

The derivative of which with respect to  $\mu$  is given by

$$\frac{d}{d\mu}P(\theta,\varphi,\mu) = \frac{\alpha(\theta+\varphi+\gamma\varphi)(\beta+\alpha(2+\gamma)(1+\varphi))}{(\beta(3+\gamma)+\alpha(4+\theta+\theta\mu+3\varphi+\mu\varphi+\gamma(2+(2+\mu)\varphi)))^2} > 0.$$

This proves the result.