

## **Policing the industrial reserve army: An international study**

**George S. Rigakos · Aysegul Ergul**

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**Abstract** Over the past three decades, the industrialized world has witnessed four resilient social trends: (1) the consistent erosion of union-membership; (2) an increase in income polarization and inequality; (3) a dramatic resurgence in popular protest; and (4) a steady rise in public and private policing employment. In this paper, we examine the relationship between these trends by theorizing and operationalizing the notion of the “industrial reserve army” and a series of related tenets in order to conduct an international ( $N=45$ ), empirical test of a nascent Marxian model of policing. By treating total policing employment as an empirical barometer of bourgeois insecurity we find that this insecurity is conditioned by two elements of Marxian political economy: (1) relative deprivation (income inequality) and (2) the rise of an industrial reserve army (manufacturing employment and unemployment). Second, while surplus value and labour militancy (strikes and lockouts per 100,000 population) rise along with union membership, the presence of higher rates of unionization appears to ameliorate the need for more policing in all but post-USSR countries. While unions assist in checking the immiseration of workers through labour actions, union membership is nonetheless inversely correlated to policing employment, giving credence to the Marxian idea that while unions help mitigate against the exploitation workers, they also act as “lieutenants of capital,” performing an essential policing function under capitalism.

Trade-unions have always been the most effective representatives of the organized labour movement to protect workers from the erosion of their wages and to control changes made in working conditions and hours worked. For Marxist political economists, the function of trade-unions was never limited to the immediate

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G. S. Rigakos (✉)  
Department of Law, Carleton University, Ottawa, Canada  
e-mail: george\_rigakos@carleton.ca

A. Ergul  
Department of Political Science, Carleton University, Ottawa, Canada

material needs of workers; rather, trade-unions were viewed as the centers in which class consciousness could flourish and through which a revolutionary movement could be carried on. Marx and Engels, however, were quick to diagnose the weaknesses of trade-union politics after witnessing the development and practices of the British trade-union movement. Their skeptical but still hopeful vision of trade-unions was repeatedly echoed by Marxist political economists of the following century.

After the Second World War, the dominant form of trade unionism recognized the primacy of the liberal democratic state and accepted the capitalist organization of production and private property. The revolutionary Marxist claims of overthrowing the state through the destruction of the capitalist mode of production were replaced by efforts to generate a dialogue and social pact among labour, capital and the state [158]. To put it differently, the goal of trade-unions to mobilize working class power for revolutionary purposes was abandoned in exchange for the legal recognition of collective bargaining and thus the state of trade-unions became crystallized as that of political actors representing an organized interest group within liberal democracy. The internalization of the attitude of “peaceful accommodation with capitalist interests” caused a deradicalization and depoliticization of the trade-union movement [158]. The effects of a paradigm shift from Keynesianism to neo-liberalism, therefore, have deeply cut into both trade-union membership and political activism.

Over the past three decades, the industrialized nations have witnessed four resilient social trends: (1) a consistent erosion of union-membership; (2) an increase in income polarization and income inequality; (3) a dramatic resurgence in popular protest in both size and intensity; and (4) a steady rise in public and private police employment. In this paper, we analyze the relationship between these trends within the broad historical project of policing by concretizing the often abstract Marxist concept of the industrial reserve army (IRA) and by interrogating Marxist appraisals of trade-unions. Thus, in the first section, we examine the Janus-faced character of the IRA in the capitalist system and discuss transformations in its size and structural context as a result of the shift from Keynesianism to neo-liberalism, a global decline in union membership, a western decline in manufacturing employment and the simultaneous rise of manufacturing unemployment. While this discussion provides a theoretical and empirical grounding for our operationalizing some of the central tenets of a Marxian political economy, in the following section we examine the historically and conceptually intimate relationship between police and capital as we treat policing employment as a barometer of bourgeois insecurity. In the section following, we discuss the state of income inequality in the world, particularly after the implementation of neo-liberal reforms including privatization, trade liberalization and labour deregulation in our exploratory model, since income inequality implicitly relates to unionization, political radicalism and policing employment. In the light of our Marxian theoretical and conceptual framework, we then present our methodology, formulate our hypothesis, describe the sample and variables used, demonstrate our findings and finally present our discussion. While we are indeed excavating Marx’s original formulations in order to inform a contemporary relationship between the IRA, policing, unions and so forth, we continue to also rely on neo-Marxist interpretations and seek to couch our analysis within the contemporary rise of neoliberal globalization.

## The industrial reserve army

With the exception of his notions of “commodity” and “surplus-value”, perhaps no other concept utilized by Marx in his critique of political economy has been more important for understanding his labour theory of value than the calibrating yet potentially revolutionary effects of the “industrial reserve army” (IRA). The IRA (or sometimes surplus population<sup>1</sup>) helps moderate the costs of labour through a heightened competition for jobs. Capitalists can thus get away with further intensifying the exploitation of workers and depressing their wages. But the reserve army also threatens the entire capitalist structure by acting as a reservoir for the desperate and dispossessed proletariat who stand ready to seize the means of production. While Marx [98] was quick to differentiate himself from the classic political economy of Adam Smith who “fetishized” the production of “vendible commodities” as supremely productive, he nonetheless follows a similar course by all but dismissing the service sector economy from his analysis and repeatedly linking “surplus-value”—the engine of wealth creation under capitalism—to manufacturing.<sup>2</sup> For Marxian political economy, therefore, the IRA plays a key revolutionary role and is, by extension, an indirect threat that the bourgeois state must secure itself against. Understanding and measuring the IRA, that mass of workers made redundant by the rising organic composition of capital, and the *rate of exploitation* they indirectly help foster are thus central Marxian concerns. If we are to attempt to operationalize Marx’s notion of the industrial reserve army<sup>3</sup> we need to take stock of how he describes its function. In Chapter 25 of *Capital*, Marx likens the IRA to a law-like, supply-and-demand, regulator of labour costs for capitalists. The more efficient that production becomes through the use of machinery (i.e. the tendency of the organic composition of capital to rise) the more workers become redundant, the more plentiful their supply, the lower the wages they are willing to work for, the more likely they are to be exploited in less efficient industries until they are once again thrown out of work. Marx describes the IRA in the following way:

The industrial reserve army, during the periods of stagnation and average prosperity, weighs down the active army of workers; during the periods of overproduction and feverish activity, it puts a curb on their pretensions. The relative surplus population is therefore the background upon which the law of the demand and supply of labor does its work. It confines the field of action of this law to the limits absolutely convenient to capital’s drive to exploit and dominate the workers. ([98]: 792)

<sup>1</sup> Lumpenproletariat is also often erroneously conflated with “surplus population” and “industrial reserve army.” See also Bovenkerk’s [11] thorough and illuminating critique of Marx and Engel’s use of the term “lumpenproletariat” as a rhetorical device.

<sup>2</sup> Scholars have debated the relative merits of Marx’s inconsistent notions of productive and unproductive labour for some time ([55]; [64]; [65]; [68]; [80]; [82]; [95]; [109]) but what is largely agreed upon is that Marx’s treatment of productive labour while initially expansive in critique and contradistinction to Smith becomes increasingly narrow with further clarification and focuses more and more on the relative position of workers to direct production [16].

<sup>3</sup> Marx also calls the industrial reserve army the “surplus population”. He uses the two terms interchangeably. We prefer to use “industrial reserve army” because in his descriptions of “productivity” and “Department I” he privileges the role of industrial production which also has implications for working class consciousness.

His pronouncements here are quite clear and we can easily see how they might translate to non-specialist labour in industrial production in the present-day, especially in an international context [67]. Marx, however, further subdivides the IRA into three additional groups: “the floating, the latent, and the stagnant” ([98]: 794) with less applicability to contemporary industrial production. As he attempts to deal with the specifics of English industrial production in the mid-nineteenth century Marx [98] marshalls evidence that “male employees are employed up to the age of maturity, but not beyond” comprising a floating surplus where “the female population grows more rapidly than the male”. He further finds that, in Manchester, “the average age at death of the laboring class was 17” resulting in “early marriages” and “orphans and pauper children”, the latter of which then making up a strata of the IRA just above that of criminals and vagabonds: the lumpenproletariat ([98]: 795–6). On the face of it, therefore, it would be a dubious exercise given the specific social context in which Marx makes his observations to attempt to link his three sub-groups of the IRA to contemporary developments in industrial production. Nevertheless, Marx elsewhere makes prophetic observations about the development of mass urbanization [62], or “the constant movement towards the towns” in the wake of agricultural industrialization which, for him, recasts the entire countryside into a “constant latent surplus population”. He also adroitly points to the rise of a “stagnant” population consisting of those workers “with extremely irregular employment” because of the lack of available work but he clearly could not foresee the massive rise of casual, non-industrial employment in the so-called ‘developed’ world [56]. We are therefore left with a concept that is quite useful and prophetic in its general sense yet far less so in its specificity. In the end, we can only be certain of two contemporary facets of the IRA in the general sense: first, that Marx sets his analysis of the IRA in the context of *industrial* production (and Department I), and second, that today, as in the nineteenth century the IRA consists of *insecure* labour always at the risk of being made redundant by machinery and the prospect of outsourcing [12, 13, 60]. The IRA, therefore, is the labour buffer through which the proletariat either cycle or must nonetheless reckon as its growth saps workers’ bargaining position and undermines their standard of living. It is for this reason that we have opted to operationalize the IRA by examining industrial employment and unemployment. The most important mechanism used by workers to offset this exploitative relationship is collective bargaining. Not surprisingly, therefore, labour unions in Marxist writing have received considerable analytic scrutiny.

### The trade unions

While syndicalism sees the ‘general strike’ as the primary weapon to destroy capitalism and reformism sees union wage demands as sufficient to better workers’ living conditions without changing the social structure of power, Marxists have been hopeful yet skeptical about the revolutionary role of trade unions. Marx and Engels conceded that the emergence of trade-unions was simply aimed at preventing the erosion of wages and monitoring working conditions and hours worked [104]. This was not only necessary but also justifiable. Marx [102] argued that “the whole history of modern industry shows that capital, if not checked, will recklessly and

ruthlessly work to cast down the whole working class to the utmost state of degradation.” By “checking this tendency”, workers are only resisting “the depreciation of [their] labour.” Thus, marketplace supply and demand in the last instance conditions the political and economic success of trade unions. The real gains of trade unions, however, were not the immediate material wage and work concessions they secured but rather the power to unite workers: “[t]he fruit of their battle lies, not in the immediate result, but in the ever-expanding union of the workers.” In defining the strength of the working class on the basis of their numbers, Marx and Engels saw the association of workers as the forerunner of an approaching decisive battle between the bourgeoisie and the proletariat.<sup>4</sup> When that decisive battle repeatedly failed to materialize after the development of the British trade-union movement in the second half of the nineteenth century, Marx and Engels took their queue from William Thompson [147] and bemoaned the rise of a new “labour aristocracy” that was distant from the proletariat both materially and ideologically ([42]: 81; [102]: 82). For Marx [101] trade-unions “fail partially from an injudicious use of their power” and because they generally limit “themselves to guerrilla war against the effects of the existing system, instead of simultaneously trying to change it.” Unions should “instead [use] their organized forces as a lever for the final emancipation of the working class, that is to say, the ultimate abolishment of the wage system.” By 1872, Marx [103] complained in his speech to the General Council of the International Worker’s Association that “[t]rade unions are praised too much; they must in the future be treated as affiliated societies and used as centers of attack in the struggle of labour against capital.” Later Marxists, from Lenin to Luxemburg, adopted similarly hopeful yet skeptical positions.

Lenin believed that trade-unions were inherently conservative because they were “spontaneously” economically subordinated to bourgeois ideology. He famously declared that “class political consciousness can be brought to the workers *only from without*, that is, only from outside the economic struggle, from outside the sphere of relations between workers and employers” ([84]: 78–79). This, of course, necessitated a “vanguard party” tasked with leading the working class away from the trivializing effects of unionism and toward a final revolutionary movement. Trotsky identified the limits of unions in their structural assimilation into capitalist state-power. This centralization of union power increased the intimacy between the trade-union aristocracy, state power and the capitalist class in the form of a triangle of control. For Trotsky [148] these new “lieutenants of capital” acquire power and use it to discipline workers on behalf of capital. Trotsky [149] argued that “[m]onopoly capitalism is less and less willing to reconcile itself to the independence of trade unions” creating instead “the reformist bureaucracy and the labour aristocracy who pick the crumbs from its banquet table.” Capturing this recurrent Marxist critique of trade union conservatism, Trotsky aptly argued that unions “become transformed into [a] *political police* before the eyes of the working class” [our emphasis]. Nonetheless, like Lenin, Trotsky [149] did not give up on trade unions altogether. Although rather than advocate for a vanguard party—for

<sup>4</sup> In this process, Engels characterized trade-unions as the military schools of class war, while Marx depicted them in relation to their role in the transformation of the working class from “class-in-itself” to “class-for-itself” ([69]: 6–7)

him, another “bureaucratic apparatus”—he instead called for a mass movement through the building of a wider working class radicalism.<sup>5</sup> Luxemburg [89] similarly analyzed unions as an “historically necessary evil” but, as they were then currently organized, comprised of structures that were “obstacles” to “further development at a certain stage of organization and at a certain degree of ripeness of conditions.” In the end, as brokers between capitalists and workers, union officials were prone to “bureaucratism and a certain narrowness of outlook” because their goal was to ameliorate and resolve class conflict as much as possible. This transforms trade-union politics into an end in itself rather than a means to revolutionize the social relations of production [90].

Gramsci’s sociological analysis of trade unions mercilessly critiqued its existing structures. He ([57]: 35) decried the fact that “even in their own home, in the house they have built tenaciously, with patient effort, cementing it with their blood and tears, the machine crushes man (sic) and bureaucracy sterilizes the creative spirit...” Trade unions, therefore, took on a managerial role within the logic of capitalism because of their dialectic position as both an opponent and a component of accumulation ([3]: 334). Given the nature of its politicking, speculating and administering in a competitive fashion the union for Gramsci [57] “cannot be the instrument for a radical renovation of society, it can provide the proletariat with proficient bureaucrats, technical experts on industrial questions of a general kind, but it cannot be the basis for proletarian power.” In sum, the general position toward trade unions by Marxists is that unions alone cannot be the vehicles for the radical transformation of the social relations of production. By their very nature trade unions do not seek to unleash the war between the bourgeoisie and the proletarian classes but rather act to keep the peace: to behave, as Trotsky put it, as policing agents for capital.

Despite the fact that there have been attempts at a “new internationalism” among unions [162] coinciding with the rise of non-traditional social movements [81] this has not forestalled “a serious decline in union membership” among industrialized countries ([70]: 9). In recent history, unions have “become perceived as tired, archaic bureaucracies, largely irrelevant to the major issues of the contemporary world: a view particularly common among those in their twenties and younger, who virtually everywhere are far less unionized than their parents.” Thus, for latter-day labour analysts like Hyman [70], unions “which embraced socialist or communist... ideologies” and “claimed to extend their concerns to the peripheral workforce” have proven “more rhetorical than real” as union priorities have been confined to “core group interests to the detriment of others.” North has thus postulated that just as Marx theorizes that the commodity acquires an enigmatic and fetishistic form when produced under capitalist relations—an exchange of things rather than people—so does the union as an aggregation of workers secure their market relationship in the form of labour as a commodity. He argues “a group of workers is a group of workers. And yet, when that group takes on the form of a trade union, it acquires, through that form, new and distinct social properties to which the workers are inevitably subordinated” ([116]: 13).

<sup>5</sup> He argued: “...the laws of history are far stronger than the bureaucratic apparatus. No matter how the methods of social betrayers differ...they will never succeed in breaking the revolutionary will of the proletariat. As time goes on, their desperate efforts to hold back the wheel of history will demonstrate more clearly to the masses that the crisis of the proletarian leadership, having become the crisis in mankind’s culture, can be resolved only by the Fourth International” ([149]: 73).

While the strength of trade-unions reached a peak point in the post-War period both in their social and political impact and in the overall membership, it was not long before this process was systematically reversed. Industrial countries have been witnessing a steady decline in trade-union membership rates over the last three decades. Much of the progress previously made by the labour movement in industrialized countries through confrontation and conflict with capitalists started to become undone in the 1980s. As Ebbinghaus and Visser [39] report, in 1990 overall union density in Western Europe fell from 40% to 34% in comparison to a decade earlier. The highest union density rates were observed in the Scandinavian countries, particularly in Sweden, Finland, Norway, and Denmark. These countries, also known as ‘Ghent countries’, have union-managed unemployment insurance schemes. In all four of them Wallerstein and Western [161] demonstrate that unionization continued to grow although at a slower pace or remained more or less stable since the 1990s.<sup>6</sup>

A steady decline in union density was observed in Germany since the 1990s. Although the process of deunionization was interrupted by the effect of the unification of West and East Germany in 1991, it continued rapidly in the 1990s and 2000s. By 2003, Visser [152] demonstrates that the gross union density rate reached its historically lowest level of 22.6%.<sup>7</sup> In France, union density started to decline in the 1980s. It fell from 18.3% in 1980 to 10.1% in 1990, and hit its lowest level at 8.0% in 1998. One of the sharpest falls in unionization took place in the United Kingdom, where union density dropped from 50.7% in 1980 to 39.3% in 1990, and reached 29.3% in 2003. In Italy, Ireland, Switzerland, and Austria, deunionization also has been continuous and consistent since the 1980s [152].<sup>8</sup>

Eastern European countries also experienced declines in trade-union membership. In Hungary, Poland, the Czech Republic, and the Slovak Republic sharp downturns in union density rates were recorded starting from the early 1990s.<sup>9</sup> The deunionization process, of course, is not restricted to European countries. The United States, Canada, Australia, and New Zealand have also been suffering peculiar declines in unionization.<sup>10</sup> Japan and the Republic of Korea have also seen a decline

<sup>6</sup> Böckerman and Uusitalo [10] claimed that union density reached its highest point (nearly 85%) in Finland in 1993, but it declined by more than 10% in less than ten years.

<sup>7</sup> For a detailed analysis of the decline of trade-union membership in Germany see Fitzenberger et al. [46]

<sup>8</sup> Greece also has gone through a sharp decline in unionization. The union density rate fell from 39% in 1980 to 23% in 2005. Data is retrieved from OECD Statistics, Trade-Union Density (%) in OECD Countries, 1960–2006. For a detailed analysis of trade-unionism in Greece see Seferiades [135].

<sup>9</sup> In Hungary, the union density rate fell from 44.7% in 1993 to 17.38% in 2005; in Poland, it dropped from 54.8% in 1990 to 15.8% in 2005; in the Czech Republic, it declined from 80.5% in 1993 to 21.6% in 2005; and, in the Slovak Republic, it fell from 49.8% in 1995 to 25.8% in 2005 (OECD, 1960–2007). Similarly remarkable reductions took place in Latvia, Lithuania, Estonia, and Slovenia. For an empirical analysis of (de)unionization and a discussion about the state of trade-unions in Eastern Europe [79].

<sup>10</sup> In the USA, the decline of union density has been constant since the 1980s. It dropped from 19.5% in 1980 to 14.0% in 1996 and 2003 it was as low as 12.4%. In Canada, union density rate dropped from 34.7% in 1980 to 32.9% in 1990 and fell to 28.4% in 2003. In Australia, union density decreased from 49.5% in 1980 to 40.5% in 1990. The decline has remained steady in the following years, reaching 22.9% in 2003. The deunionization process shows similar patterns in New Zealand, where the union density rate was 69.1% in 1980, dropping to 51% in 1990 and 22.1% in 2002 [152]. In the United States and Canada, the decline in unionization occurred mainly in the private sector while public sector unionization has remained relatively constant in the USA and has increased in Canada. For more details see Blanchflower (2006; [17]; [58]). For a discussion of the deunionization process in Australia see Leigh [83].

in unionization. Both countries have gone through steady and remarkable losses in union membership since 1980.<sup>11</sup>

In the existing literature, this global decline in union membership is explained through (1) cyclical, structural, and institutional factors [39, 85, 161]; (2) individual membership decisions (personal and workplace characteristics, social environment) [46]; (3) product market competition [83]; and (4) changes in normative orientation from collectivism towards individualism [39]. These changes, however, must be viewed within the overarching context of the intensification of production in the wake of a paradigm shift away from Keynesianism to neo-liberalism at the beginning of 1980s. Deregulation, decentralization and extensive privatization are the main characteristics of neo-liberalism and they have generated a shift toward the decentralization of bargaining, labour market deregulation and the flexibilization of production in capital-labour relations [38, 76]. As a result, a hospitable Keynesian postwar environment has been replaced with the enactment of discouraging, if not hostile, labour legislation and new regulations concerning industrial relations since the 1980s [118, 161].

Newly elected conservative governments passed legislation to “tame trade-unions” which they perceived as the cause of low productivity. Changes made to the legal frameworks governing unions included the banning of closed shops, promoting individual bargaining over collective bargaining, decreasing legal immunity (available to unions for damages in their activities), discouraging recruitment and strikes, and translating trade-union services into public goods [49, 118].

The introduction of independent unemployment insurance funds (UI) in Ghent countries like Finland and Sweden or the replacement of voluntary but publicly supported unemployment insurance managed by unions with statutory regulations in Norway and the Netherlands has also generated a decline in union density because the connection between earnings-related unemployment benefits and union-membership has gradually broken down [10, 85].

The steady decline in global unionization rates has been coupled with a precipitous decline in manufacturing employment, the sector that Marxist interpretations identify as the source of productive labour *par excellence* and the prime vehicle for both capitalist growth and its demise. Indeed, contemporary scholars have continued to pour over Marx’s sometimes contradictory assertions about mental versus manual labour, productive versus unproductive labour, how service within and outside the realm of circulation should be understood, and finally whether the demise of capitalism might be better grasped, anticipated, or accelerated by theorizing and empirically mapping workforce composition based on proximity to production (e.g. [6, 16, 94]). In short, manufacturing employment and especially manufacturing unemployment speaks directly to core Marxist maxims dealing with value creation, class consciousness, and revolution.

In recent years, western countries have experienced a steady decline in the manufacturing sector’s share of overall employment, which has been accompanied by the rapid employment growth of the services sector. This decline is predicted to

<sup>11</sup> In Japan, the union density rate fell from 31.1% in 1980 to 25.4% in 1990 and to 19.7% in 2003. In the Republic of Korea, the union density rate went down from 14.7% in 1980 to 11.2% in 2003 (OECD 1960–2007).

continue into the future ([3, 8, 12, 47, 48, 119, 156, 169, 170, 172]).<sup>12</sup> From the perspective of Marxian political economy, the decline in manufacturing follows a (prophetically) recognizable script. Productivity in established markets becomes very high. The increased use of sophisticated machinery, purchased with the profits already made, precipitates a rise in the organic composition of capital. Manufacturing unemployment rises. In order to compete for increasingly narrow margins, other capitalists buy newer machinery or innovate using credit. Cheaper, less efficient international competition exacerbates this problem. Credit continues to flow, spawning the further intensification of production and allowing consumers to borrow in order to buy more. The domestic service sector economy and the circulatory spheres balloon to take up the required demand for the overproduction of manufactured goods but this is not sustainable in the long term, eventually resulting in a system-wide crash (see [6]). Thus, Pilat et al. [119] argue that although there has been a continuous decline in manufacturing employment over the past three decades in western countries, manufacturing production and value-added have continued to grow as a result of high productivity.<sup>13</sup> Despite this high productivity rate, the share of manufacturing in total economic activity and value-added have continued to decline in formerly industrialized countries as a result of the outsourcing of production to foreign manufacturers, the demographic effects of increased demand for services, productivity growth, and fluctuations in exchange rates ([1, 8, 19, 23, 119, 172]). It is nonetheless important to note that while our sample of primarily northern industrialized nations has seen a withering industrial base, overall global manufacturing employment has actually increased with the rise of China and India [77]. Capitalism, after all, is a global system.

In short, the effects of Keynesian welfarism were structurally significant for workers, effecting changes in the relationship between labour and the state and ushering in a new period of union de-radicalization and its complicity with capital. Depending on each country's sociopolitical history and its position in world economic affairs, the subsequent rise of neo-liberalism resulted in important ideological and structural changes throughout the global system—in part, through international institutions such as the IMF and WTO—which induced widespread insecurity and further institutionally ossified the union system. In reviewing the importance of the IRA in Marxist thought, we have attended to: (1) how Marx's notion of productive labour, for economic and political reasons, privileges manufacturing; (2) the fact that Marxists are skeptical about unions, labeling their

<sup>12</sup> In most industrialized countries, the decline of the share of manufacturing in total employment has been substantial since the 1970s [119]. In the United States, the share of manufacturing employment had begun its descent around the 1950s, becoming particularly sharp since 2000 ([23, 48]). In Germany, United Kingdom and Luxemburg, the largest drop in employment shares had been experienced from 1985 to 2002 ([8, 119]). In the spectrum of industrialized countries, Canada, Ireland, Italy and Spain are the economies in which the absolute share of manufacturing has declined the least over the past two decades. While overall manufacturing employment has fallen, not all sectors have fared equally ([19, 119]).

<sup>13</sup> Pilat et al. [119] argue that the strong growth in manufacturing production and value-added are witnessed particularly in Canada and the United States. In Germany, Italy, the United Kingdom and Japan manufacturing value-added has grown very little while it has increased particularly quickly in Finland, Hungary, Korea, Mexico, Poland and Sweden in recent years.

executives as “lieutenants of capital” and “political police”; (3) a global trend in declining unionization; and (4) a western decline in manufacturing as a per cent of the total workforce and the concomitant rise of manufacturing unemployment. The point of this review is to provide a theoretical and empirical grounding for our imminent operationalization of these central tenets of Marxian political economy. *Our general hypothesis is that these qualitative and quantitative changes in the size and structural context of the industrial reserve army produce insecurities that condition and are conditioned by policing.* Thus, while neo-liberalism created insecurity within the labour movement, it simultaneously helped set the conditions under which public and private security employment flourished. In the first instance because security products and employees are central to intensifying labour productivity in the form of surplus-value and second, because security—like other social institutions—is unapologetically unfettered, privatized [71], and commodified [113, 121, 141] under neo-liberalism. It is to this historical and conceptual connection between police and capital that we turn to next.

### The policing industry

By about the early 1970s, private security employment (per 100, 000 population) in North America had already overtaken public police employment [75, 123]. Today, conservative estimates place the ratio of public to private policing at about 4:1 in the USA [30] and at least 2:1 in Canada [133, 146]. Similar growth has been reported in the U.K. [73], Germany [40], Greece [131], Poland [88], the Netherlands [150] and the rest of Europe [33]. Despite the fact that public expenditures on policing grew consistently in the aftermath of the OPEC crisis, private security employment continues to rise sharply in most industrialized nations.<sup>14</sup> In the wake of the collapse of the Soviet system, the liberalization of markets in the former Eastern Bloc, and the sudden glut of trained state security agents with strong ties to former communist apparatchiks, Eastern European nations [87], the Ukraine and Russia [154] all saw sudden booms in private security. In some cases, the state had little choice but to attempt to legalize and regulate what was already fast becoming a system-wide protection racket economy [134]. As key industries became privatized, the policing apparatus set about protecting the state against the inherent *insecurity* of private property relations ([112]: 44). This also meant widespread licensing and monitoring; the formation of industry associations; and the increased global concentration of contract private security provision. In 2002, for example, CoESS (the Confederation of European Security Services), an umbrella organization for national private security associations in Europe, was established with the objective of “harmonization of national legislation” to foster open competition for security services in all member states. Today CoESS is undergoing another expansion as it assesses the inclusion of new member states, and even non-member states from the former Eastern Bloc, Asia and Africa.

Prior to the formation of CoESS, Group 4 Falck of Denmark merged with G4S of Britain and adopted the latter’s name, making it the world’s largest security service

<sup>14</sup> For countries where such longitudinal data has been available.

provider. The company had already announced ten takeovers in Germany by 2001.<sup>15</sup> In 1999 Securitas AB, their only substantial international competitor employing over 210,000 people worldwide, purchased Pinkerton in the USA which increased Securitas' employee pool by another 117,000.<sup>16</sup> Not to be outdone, G4S bought Wackenhut in 2002, a leading US security company that operates dozens of private prisons. Today, G4S operates in 110 countries, and employs over 600,000 security guards from Lesotho to Luxemburg and is the largest security provider in the world. As an exemplar of the ubiquitous nature of contemporary security provision, G4S runs detention facilities in Australia, mining operations in Indonesia, and rock concerts in London. Security services now police all circuits of capital from primary production to sites of mass consumption.

Across the globe, trade liberalization, and 'contracting out' policies under neo-liberalism have helped the security industry prosper. Security firms are now engaged in policing functions that only decades previous would have been viewed as a public responsibility: patrols of outdoor business districts and massive urban commercial and residential complexes; the guarding of penal institutions, nuclear facilities, seaports, airports, and even police stations (e.g. [5, 14, 71, 73, 124, 126, 137, 159]). Marxist analysts have long been aware of the role played by the public and private police in suppressing worker's organizations (e.g. [61]), responding to strikes and lock-outs [24, 164], and even their pivotal function for inculcating a wage-labour system at the height of mercantile capitalism [106, 111, 112, 129, 130, 143]. In more recent years, they have pointed to the rise of private security in spaces of consumption ([40, 140, 142]), the emergence of aggressive forms of "parapolicing" [124], and have theorized how the "security commodity" itself operates in a capitalist system [113, 121, 122, 141]. In this sense, the provision of policing both historically and in the present day is conceived of as a social control project that extends to a multiplicity of public, private and hybrid agencies (e.g. [125]), an observation also known to scholars working in other theoretical traditions (e.g. [71, 72, 78, 137]).

At the same time, scholars have rediscovered the genealogical connection between policing as we understand it today and its importance for disciplining labour and fabricating a social and economic order as early as the mid seventeenth century [111, 128]. Enforcing the wage labour system was essential for capitalism's hegemony [106, 114]. The police project, therefore, has a long history, emerging as a civilizing 'science' in the works of Cameralist thinkers such as Justi [155] and von Sonnenfels [139] and eventually as an essential system of order maintenance for the discipline of the indigent, the poor, and the working classes in the works of Colquhoun [21, 22]. The binding element in all of this enlightenment discourse is

<sup>15</sup> (ADS Sicherheit Group, Top Control Group), Hungary (Bantech Security Rt.), Austria (SOS), Finland (SPAC), Czech Republic (BOS: Bankovi Ochranna Sluzba, a.s.), France (OGS, EuroGuard), Poland (BRE Services), and Norway (Unikey AS). These acquisitions were quite large. EuroGuard employed 4,200, ADS 1,200 and BOS 1,200.

<sup>16</sup> Immediately after the takeover, two regional market leaders were also acquired in the U.S.: First security Corp. and American Protective Services Inc. This was followed by the purchase of Smith Security Inc., Doyle Protective Service Inc., and APG Security. In 2000, Securitas acquired Burns, thus making it a major player in the largest security market in the world overnight. In 2001, Securitas bought Loomis Amored car, a company with over 220 offices across the United States, employing another 2,200 officers.

the conceptual connection made between commerce, security and a disciplined workforce [117, 130]. In the English context, this conceptual connection is personified in the magistrate, police reformer and first chief Constable of the Thames River Police, Patrick Colquhoun [21] who advocated a “General Police System” (see [129]) aimed at enforcing the wage system, the elimination of “lumping rates”, and the systematic pursuit of theft and losses on the docks through a centralized, professional police force. Even today, Colquhoun’s early nineteenth century order instructing his police to ban “wide jemmies”, loose clothing and deep pockets and search all workers on their way to and from the docks are figuratively, if not literally, present in almost all contemporary security guards’ standing orders. The first bona fide, salaried police force in London, therefore, was actually privately funded: four-fifths of their costs were paid by the West India merchants who elevated the River Thames into the most important trading and commercial artery of the nineteenth century.<sup>17</sup> Colquhoun’s plans did not go unopposed. The Thames River police office was sacked by angry dock-workers just as the infamous Bow Street office had two decades earlier, but the new police persevered [26]. From the London docksides of the early nineteenth century to the American industrial unrest of the early twentieth century (see [7, 24, 164]), public and private policing worked together to help intensify production, enforce wage control and battle unionization efforts.

Neo-liberalism, therefore, may have helped liberate what has always been an integral and seminal part of capital accumulation internationally: the deep interpenetration between police and commerce. While contemporary analysts have persuasively argued that the proliferation of private security can be linked to the development of mass private property [136],<sup>18</sup> the advancing logics of a risk society [43, 72],<sup>19</sup> and the retreat and recrudescence of state policing [142], it must also be remembered that these social developments can also be seen as manifestations of longer-term, now unfettered tendencies of police and capital. Nonetheless, the rise of private security (both in terms of overall employment and the production of vendible commodities such as alarms, surveillance cameras and the like), our increasing reliance on social surveillance and our heightened sense of unease [50, 59] have not significantly threatened overall employment in *public* policing which has also continued to increase alongside the private sector [123] especially after 9–11. In the wake of 9–11 and the global financial crisis of 2008 onwards, security providers, both public and private, have seen no abatement in demand or resources. The growth of domestic security employment takes on a renewed salience in light of structural changes under neo-liberalism that have significantly affected union membership and activism. When viewed within the broad historical project of police, the contemporary rise of public and private policing, the relationship between the two and their relationship to union membership, activism and the IRA can empirically and theoretically inform Marxian political economy.

<sup>17</sup> Earlier forms of organized police such as the Bow Street Runners under the Fielding brothers were important fore-runners [41]. In order to sell the success of his Thames River Police experiment, Colquhoun [20] published his *Treatise on the Police of the River Thames*, supplying a cost-benefit analysis, in statistical terms, for the cost-saving and disciplining role of his new police.

<sup>18</sup> For a balanced critique see Jones and Newburn [74]

<sup>19</sup> For a critique see Rigakos [122, 124]

## Inequality

In a pronouncement that would set the framework for scholarly discussions about inequality for generations, Adam Smith defended the emergent class distinctions that sprang from early capitalism by unapologetically arguing that the “accommodations” of “an industrious and frugal peasant” always “exceed[ed] that of many an African king, the absolute master of the lives and liberties of ten thousand naked savages” ([138]: 18). His defense of the inequities of capitalism was based on the idea that *absolute* poverty is reduced wherever capitalism flourished. The lowest rungs of the social hierarchy are always better off under capitalist relations than under any other mode of production. Marx and Engels [104], of course, agreed that capitalism had “accomplished wonders far surpassing Egyptian pyramids, Roman aqueducts, and Gothic cathedrals.” And that capitalism had “conducted expeditions that put in the shade all former Exoduses of nations and crusades”. At the same time, however, Marx [99] pointed out that poverty was *relative* rather than absolute. He argued that “our wants and pleasures have their origin in society” and so “we therefore measure them in relation to society” not “in relation to the objects which serve for their gratification”. Since our gains and possessions “are of a social nature, they are of a relative nature.” To illustrate, he offered the following example:

A house may be large or small; as long as the neighbouring houses are likewise small, it satisfies all social requirements for a residence. But let there arise next to the little house a palace, and the little house shrinks into a hut. The little house now makes it clear that its inmate has no social position at all to maintain, or but a very insignificant one; and however high it may shoot up in the course of civilization, if the neighbouring palace rises in equal or even in greater measure, the occupant of the relatively little house will always find himself more uncomfortable, more dissatisfied, more cramped within his four walls. ([99]: 33)

While living conditions may have improved for the lowest rungs of society, they improved much more significantly for the bourgeoisie whose source of wealth was directly tied to the exploitation of workers.

Today, advocates of global “free market” capitalism believe neo-liberalism is the stimulus of growth and development. They advocate openness to trade and investment in order to spur economic growth that in turn raises income levels and the standard of living. Developing countries that open their markets and liberalize their economies therefore grow faster which in turn leads to the narrowing of income differences with the rest of the world [63]. In post-Soviet systems, for example, neo-liberal reformers have concluded that in countries where privatization, trade liberalization, and labour deregulation policies were adopted quickly and aggressively, GDP grew the fastest and people saw the greatest changes in their standard of living [4].

Scholars on the other side of the spectrum, however, have demonstrated that income inequality has continued to rise, rather than decline, under neoliberal reforms [18, 34, 53, 107, 120, 144, 157]. They find that world income inequality has actually increased over the past two to three decades both between and within countries [107, 157].<sup>20</sup> Pay

<sup>20</sup> Neoliberal scholars have argued that global income inequality between nations has been declining since around the 1980s ([168]; [35]; [45]; [36]; [115]).

inequality within countries was stable or declining from the early 1960s to the early 1980s, but it has increased sharply and continuously across the globe [51, 52, 157]. It is at this point that the ghosts of Smith and Marx most decidedly haunt the present. The proportion of the world's population living in extreme poverty, critical scholars must concede, has fallen precipitously in the last three decades especially with the economic rise of China and India. In this way, Smith is clearly vindicated: “unfettered” capitalism does indeed elevate the lowest out of absolute poverty and they are much wealthier today than they were before. But in 2010 as in 1850, the issue for Marxists remains relative deprivation. On this measure—comparing the richest to the poorest— income polarization has increased markedly. The income gap between people living in the top fifth of the richest countries and those living in the bottom fifth was 30:1 in 1960, 60:1 in 1990, and 74:1 in 1997 [66]. In 2005, the Human Development Report stated “the world's richest 500 individuals have a combined income greater than that of the poorest 416 million.” In the same year the 2.5 billion people, or 40% of the world's population, that lived on less than two dollars a day accounted for 5% of global income while the richest 10%, almost all of whom lived in high income countries, accounted for 54% of global income [163]. According the World Institute for Economic Research [31], the richest two per cent of adults in the world owned more than half of global household wealth while the poorer 50% of the world's adults owned barely 1% of global wealth.

These disparities will likely become even more pronounced following the economic crisis of 2008–2009. From a Marxian perspective understanding the effect of relative deprivation on the immiseration of the multitudes [60] and how this income inequality relates to unionization, radicalism and state and corporate insecurity is vital. If indeed bourgeois society's “supreme concept” is “security” as Marx forewarns, then what can we say of the empirical relation between policing employment and inequality?

## Method and hypothesis

Our general hypothesis is that quantitative and qualitative transformations in the size and structural context of the IRA produce insecurities that condition and are conditioned by policing. Our immediate analytic concern is to move from the abstract to the concrete by operationalizing our hypothesis through an exploration of the associations between what we identify as nine key variables that are constituent indicators of the relationship between policing and labour. To this end, our aim is to offer an exploratory analysis and preliminary relational map between these component variables in the hopes of providing an empirically informed theoretical contribution to a Marxian political economy of policing. As Marx [97] himself prescribed in his method of political economy: “the concrete is the concrete because it is the concentration of many determinations” which necessitates our apprehension of “a rich totality of many determinations and relations.” This means moving from the abstract to the concrete and back to the abstract because “society must always be kept in mind as the presupposition.”

Our analysis employs an international, comparative approach for examining the empirical relationships between nine variables that emanate from our interpretation

and theoretical concretization of a Marxian political economy of policing: (1) public police employment, (2) private security employment, (3) combined policing employment, (4) union membership, (5) strikes and lock-outs, (6) manufacturing as a per cent of the workforce, (7) manufacturing unemployment, (8) inequality, and (9) surplus-value.<sup>21</sup> We test the relationship between these variables for 45 primarily northern industrialized countries for the snap-shot year 2004.<sup>22</sup> Our statistical analysis consists of correlations and comparisons of means. We restrict ourselves to this level of statistical analysis for two reasons. First, there is no epistemic basis for classifying a dependent variable among these measures according to the tenets of Marxian political economy. In fact, our theoretical analysis has demonstrated that these relationships are conditional and relational. Second, this is an exploratory study and so it is more than sufficient at this stage to work toward building a model based upon relational connections.<sup>23</sup>

### Sample and variables

In this section, we briefly overview our data sources. A more detailed account by country and year is provided in the [Appendix](#). **Public police and private security statistics** utilized in our international comparative analysis were derived from three main sources: (1) the European Sourcebook of Criminal Justice Statistics (2006); (2) the Panoramic Overview of the Private Security Industry in the 25 Member States of the European Union (2004) by the European Commission for the Confederation of European Security Services (CoESS)<sup>24</sup>; and (3) the report on SAWL and Private Security Companies in South Eastern Europe (2005) by the South Eastern Europe Clearinghouse for the Control of Small Arms and Light Weapons (SEESAC).

Two sets of data regarding **union-membership** are typically used in the existing literature: overall unionization and union density (e.g. [85, 152]). Overall unionization is the percentage of the population belonging to a union. Union density is the percentage of the active workforce belonging to a union. To calculate overall unionization, we have used data from the World Values Survey (WVS) which has been conducted in a number of successive “waves” including 1981, 1990–1991,

<sup>21</sup> We also considered other test variables including overall unemployment and unemployment by sectors including service, public service, and agriculture, and GDP spent on the military, property crime, and violent crime. These could also be less directly related to an empirical examination of policing the industrial reserve army but did not immediately fit our analytic model. We tested them in any case and none of these variables were statistically related to policing, surplus value, or inequality.

<sup>22</sup> For our international comparison it was sometimes necessary to transpose annual data from other years (usually a one-year deviation) in order to create a complete dataset. Where this occurred we have noted it in the [Appendix](#). Indeed, this also explains why our snapshot year is 2004. World-wide surveys such as the WVS database and national accounting statistics from emerging and post-Soviet economies make obtaining up-to-date statistics almost impossible for non-EU and non-NAFTA nations. Current police employment statistics are also sometimes considered a national security matter in certain countries (e.g. Turkey and Greece).

<sup>23</sup> Albeit, this is still an hypothetico-deductive test of a Marxian approach to the study of policing.

<sup>24</sup> The CoESS Report for 2006–2007 regarding the number of employees of private security companies was also referred to in this study.

1995–1996, and 1999–2001 in order to investigate socio-cultural and political changes in world values. In this paper, only the results of the most recent survey are employed.<sup>25</sup> The unionization variable utilized in this analysis is based on the following question from the WVS: “do you belong to labour union?” We have also calculated union-membership as a percentage of the population by using data from the OECD Stat Extracts,<sup>26</sup> European Industrial Relations Observatory Online<sup>27</sup> and population data from the World Development Indicators. We use these data as a substitute for missing reports from the WVS. It is important to note, therefore, that it is not the union *density* rate<sup>28</sup> but rather union *membership* on the whole that we rely on in our comparative analysis because, from the perspective of Marxian political economy, there is no theoretical rationale for excluding students or workers not currently employed. Indeed, there is probably a contrary need to use an even broader unionization rate calculation to capture the importance of the supposed counter-revolutionary effect of an unproductive lumpenproletariat: that rabble [11] which does not actually seek work. Such a calculation could incorporate the prison population or even some military jobs in the denominator to account for the economic effect of all surplus labour on employment insecurity.<sup>29</sup> For the purposes of this analysis we use the more appropriate measure of union membership as a percentage of the population.

The data for **strikes and lock-outs, manufacturing employment as a percentage of the workforce** and **manufacturing unemployment** were mostly obtained from the International Labor Organization (ILO) online (LABORSTA Internet). The ILO Department of Statistics maintains up-to-date international databases on behalf of the United Nations, trains national accounting agencies in member states and coordinates international statistical standards. We re-calculate strikes and lock-outs as a rate per 100,000 population in order to make international comparisons.

The most widely used measure of income **inequality** in existence today is the Gini coefficient. Developed by the Italian statistician Corrado Gini [54], the coefficient is the ratio of the area under a line of equality where one axis is the cumulative share of income and the other axis is the cumulative share of people from the lowest to the highest. The coefficient produces a range from zero to one and is

<sup>25</sup> Another WVS wave took place from 2003–2005, however, only Kyrgystan, Hong Kong and Morocco were asked the unionization question.

<sup>26</sup> The data retrieved from OECD Stat Extracts included the countries listed: Australia, Austria, Belgium, Canada, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Luxemburg, Netherlands, Norway, Poland, Portugal, Slovakia, Spain, Sweden, Switzerland, Turkey, UK, Japan, Republic of Korea, USA.

<sup>27</sup> The data retrieved from eironline include: Bulgaria, Cyprus, Estonia, Latvia, Romania, and Slovenia.

<sup>28</sup> To calculate union density, what Visser [152] defines as “the ratio of union membership to potential membership” one must consider: gross union density and net union density. The gross density rate is defined as the “total union membership including the unemployed, students and retired workers as a share of either wage or salary earners in employment or of civilian labour force, which includes the unemployed” [85]. The net union density rate is the ratio of the employed union members (total membership less unemployed, retirees, and students) to the number of active wage and salary earners.

<sup>29</sup> In any case, to allay any concerns we have also run the most recent OECD net union density statistics for 2000 (the closest coterminous year) and the gross union density statistics for 2004 (these results are not reported). These density measures repeatedly reinforce the results of our analysis using the WVS data.

often multiplied by 100. The higher the Gini coefficient, the higher the rate of income inequality. If  $G=0$ , then everyone receives the same percentage of income—a completely egalitarian society. If  $G=100$  then one person has all the income—a completely unequal society. There are many limitations to the Gini coefficient as a measure of inequality ([9, 15, 25, 37, 86, 105, 108, 132, 145, 171]). From a Marxist perspective these include: (1) the measure's inability to calculate "net worth" including wealth of land and other assets; (2) its exclusion of familial wealth and future inheritance; (3) its statistical indifference to dramatic regional variations within nations; (4) its tendency to obscure gross inequities in component income brackets; and (5) the measure's ignorance of wealth based on barter, credit and work in kind. Despite these limitations, the Gini coefficient is still the best available measure of income inequality and has been used for almost a century to track national and international trends in inequality. With few exceptions (see Appendix) we employ the World Income Inequality Database (WIID) compiled by the World Institute for the Development of Economic Research (WIDER) online. We use a three-year average Gini coefficient leading up to 2004.

Perhaps no other Marxist economic concept has received as much analytic attention as **surplus-value**. This is perfectly understandable given that it is the fundamental measure of exploitation, the source of wealth for the bourgeoisie, and the engine of the capitalist mode of production. Surplus-value is the unpaid labour-time capitalists extract from the proletariat in order to accrue surplus. It is realized in the final sale of the commodity. It approximates but is not the same as profit. As Marx [96] puts it "surplus-value originates from the fact that the commodities are exchanged at their value, for the labour-time contained in them, which however is in part *unpaid for*." Measuring surplus-value, however, is no easy task. Bourgeois economic statistics do not directly capture what Marx meant by the rate of surplus-value in his calculation:

$$SV = \frac{\text{volume of surplus produced}}{\text{variable capital expended (labour)}}$$

While there have been diligent attempts to approximate the rate of surplus value using existing economic measures ([2, 27–29, 91, 93, 110, 151, 165–167]) the simplest and most widely applicable measure adopted by Marxian scholars [29, 91, 92], especially for facilitating international comparisons is:

$$SV = \frac{(\text{gross value added} - \text{total manufacturing workers' earnings})}{\text{total manufacturing workers' earnings}}$$

We also adopt this calculation. The measures that comprise our formula are derived from: (1) a custom data retrieval of *gross value-added* from the World Bank (Development Indicator); and (2) a secondary calculation of *annual earnings of manufacturing workers* based on data derived from the ILO (LABORSTA Internet) utilizing total employment by economic activity (i.e. manufacturing), wages in manufacturing, and hours of work in manufacturing. These calculations were then made comparable by converting all foreign currencies into U.S. dollars. We used a four-year average leading up to and including our snap-shot year of 2004 (Tables 1, 2, 3 and 4).

**Table 1** Correlations-all countries

	Pearson Correlation	Public Police	Private Security	Total Public and Private Policing	Unionization as% of pop.	Avg. Strikes & Lockouts 1990-2004	Manufacturing as% of total emp 2004	Avg. Manuf. Unemployment 2000-2004	Avg. Gini coefficient 2000-2003	Avg. Surplus Value 2000-2004
Public Police	1	.134	.828 <sup>a</sup>	-.039	-.024	.179	.302	.283	.062	
	Sig. (2-tailed)	.382	.000	.800	.882	.256	.083	.066	.708	
	N	45	45	45	40	42	34	43	39	
Private Security	Pearson Correlation	.134	.665 <sup>a</sup>	-.281	-.200	.342 <sup>b</sup>	.430 <sup>b</sup>	.242	.089	
	Sig. (2-tailed)	.382	.000	.061	.216	.027	.011	.117	.590	
	N	45	45	45	40	42	34	43	39	
Total Public and Private Policing	Pearson Correlation	.828 <sup>a</sup>	.665 <sup>a</sup>	-.190	-.120	.331 <sup>b</sup>	.462 <sup>a</sup>	.344	.095	
	Sig. (2-tailed)	.000	.000	.212	.461	.032	.006	.024	.564	
	N	45	45	45	40	42	34	43	39	
Unionization as% of pop.	Pearson Correlation	-.039	-.281	1	.438 <sup>a</sup>	-.145	-.135	-.221	-.127	
	Sig. (2-tailed)	.800	.061	.212	.005	.359	.445	.154	.440	
	N	45	45	45	40	42	34	43	39	

Avg. Strikes & Lockouts 1990–2004	Pearson Correlation	-.024	-.200	-.120	.438 <sup>a</sup>	1	-.171	-.131	.035	-.436 <sup>a</sup>
	Sig. (2-tailed)	.882	.216	.461	.005		.310	.474	.836	.009
	N	40	40	40	40	40	37	32	38	35
Manufacturing as% of total emp 2004	Pearson Correlation	.179	.342 <sup>b</sup>	.331 <sup>b</sup>	-.145	-.171	1	.631 <sup>a</sup>	-.188	-.172
	Sig. (2-tailed)	.256	.027	.032	.359	.310		.000	.234	.302
	N	42	42	42	42	37	42	33	42	38
Avg. Manuf. Unemployment 2000–2004	Pearson Correlation	.302	.430 <sup>b</sup>	.462 <sup>a</sup>	-.135	-.131	.631 <sup>a</sup>	1	-.002	.202
	Sig. (2-tailed)	.083	.011	.006	.445	.474	.000		.991	.275
	N	34	34	34	34	32	33	34	34	31
Avg. Gini coefficient 2000–2003	Pearson Correlation	.283	.242	.344 <sup>b</sup>	-.221	.035	-.188	-.002	1	-.112
	Sig. (2-tailed)	.066	.117	.024	.154	.836	.234	.991		.498
	N	43	43	43	43	38	42	34	43	39
Avg. Surplus Value 2000–2004	Pearson Correlation	.062	.089	.095	-.127	-.436 <sup>a</sup>	-.172	.202	-.112	1
	Sig. (2-tailed)	.708	.590	.564	.440	.009	.302	.275	.498	
	N	39	39	39	39	35	38	31	39	39

<sup>a</sup> Correlation is significant at the 0.01 level (2-tailed)

<sup>b</sup> Correlation is significant at the 0.05 level (2-tailed)

**Table 2** Correlations—Excluding former USSR countries

	Public Police	Private Security	Total Public and Private Policing	Unionization as% of pop.	Avg. Strikes & Lockouts 1990–2004	Manufacturing as% of total emp 2004	Avg. Manuf. Unemployment 2000–2004	Avg. Gini coefficient 2000–2003	Avg. Surplus Value 2000–2004
Public Police									
	Pearson Correlation	.041	.626 <sup>a</sup>	-.295	-.128	.389 <sup>b</sup>	.249	-.140	.058
	Sig. (2-tailed)	.807	.000	.072	.472	.021	.192	.415	.744
	N	38	38	38	34	35	29	36	34
Private Security									
	Pearson Correlation	.041	.804 <sup>a</sup>	-.324 <sup>b</sup>	-.258	.376 <sup>b</sup>	.513 <sup>a</sup>	.186	.090
	Sig. (2-tailed)	.807	.000	.047	.141	.026	.004	.278	.612
	N	38	38	38	34	35	29	36	34
Total Public and Private Policing									
	Pearson Correlation	.626 <sup>a</sup>	.804 <sup>a</sup>	-.426 <sup>a</sup>	-.274	.497 <sup>a</sup>	.553 <sup>a</sup>	.084	.105
	Sig. (2-tailed)	.000	.000	.008	.117	.002	.002	.626	.555
	N	38	38	38	34	35	29	36	34
Unionization as% of pop.									
	Pearson Correlation	-.295	-.426 <sup>a</sup>	1	.421 <sup>b</sup>	-.187	-.111	-.285	-.118
	Sig. (2-tailed)	.072	.008	.008	.013	.281	.566	.092	.508
	N	38	38	38	34	35	29	36	34

Avg. Strikes & Lockouts 1990-2004	Pearson Correlation	-.128	-2.58	-.274	.421 <sup>b</sup>	1	-.160	-.078	.027	-.448 <sup>b</sup>
	Sig. (2-tailed)	.472	.141	.117	.013	.390		.700	.883	.013
	N	34	34	34	34	34	31	27	32	30
Manufacturing as% of total emp 2004	Pearson Correlation	.389 <sup>b</sup>	.376 <sup>b</sup>	.497 <sup>a</sup>	-.187	-.160	1	.711 <sup>a</sup>	-.118	-.219
	Sig. (2-tailed)	.021	.026	.002	.281	.390		.000	.500	.221
	N	35	35	35	35	31	35	28	35	33
Avg. Manuf. Unemployment 2000-2004	Pearson Correlation	.249	.513 <sup>a</sup>	.553 <sup>a</sup>	-.111	-.078	.711 <sup>a</sup>	1	-.082	.120
	Sig. (2-tailed)	.192	.004	.002	.566	.700	.000		.673	.553
	N	29	29	29	29	27	28	29	29	27
Avg. Gini coefficient 2000-2003	Pearson Correlation	-.140	.186	.084	-.285	.027	-.118	-.082	1	-.114
	Sig. (2-tailed)	.415	.278	.626	.092	.883	.500	.673		.520
	N	36	36	36	36	32	35	29	36	34
Avg. Surplus Value 2000-2004	Pearson Correlation	.058	.090	.105	-.118	-.448 <sup>b</sup>	-.219	.120	-.114	1
	Sig. (2-tailed)	.744	.612	.555	.508	.013	.221	.553	.520	
	N	34	34	34	34	30	33	27	34	34

<sup>a</sup> Correlation is significant at the 0.01 level (2-tailed).

<sup>b</sup> Correlation is significant at the 0.05 level (2-tailed).

**Table 3** Correlations—Former USSR countries only

	Public Police	Private Security	Total Public and Private Policing	Unionization as% of pop.	Avg. Strikes & Lockouts 1990–2004	Manufacturing as% of total emp 2004	Avg. Manuf. Unemployment 2000–2004	Avg. Gini coefficient 2000–2003	Avg. Surplus Value 2000–2004
Public Police	Pearson Correlation Sig. (2-tailed) N	.317 .489 7	.948 <sup>a</sup> .001 7	.669 .100 7	.565 .242 6	.301 .512 7	.176 .777 5	.423 .345 7	.450 .447 5
Private Security	Pearson Correlation Sig. (2-tailed) N	.317 .489 7	.600 .155 7	.207 .656 7	.620 .190 6	.344 .449 7	-.288 .638 5	.639 .122 7	.179 .773 5
Total Public and Private Policing	Pearson Correlation Sig. (2-tailed) N	.600 .155 7	.948 <sup>a</sup> .001 7	.632 .128 7	.690 .129 6	.367 .418 7	.040 .949 5	.561 .190 7	.390 .516 5
Unionization as% of pop.	Pearson Correlation Sig. (2-tailed)	.207 .669	.632 .128	1	.775 .070	-.024 .959	-.691 .196	.436 .328	-.483 .410

Avg. Strikes & Lockouts 1990-2004	N	7	7	7	7	6	7	5	7	5
Pearson Correlation		.565	.620	.690	.775	1	-.339	-.684	.908 <sup>b</sup>	-.174
Sig. (2-tailed)		.242	.190	.129	.070		.511	.203	.012	.780
N		6	6	6	6	6	6	5	6	5
Manufacturing as% of total emp 2004	N	7	7	7	7	6	7	5	7	5
Pearson Correlation		.301	.344	.367	-.024	-.339	.511	.673	-.296	.525
Sig. (2-tailed)		.512	.449	.418	.959	.511		.214	.519	.363
N		7	7	7	7	6	7	5	7	5
Avg. Manuf. Unemployment 2000-2004	N	7	7	7	7	6	7	1	7	5
Pearson Correlation		.176	-.288	.040	-.691	-.684	.673	.673	-.501	.908
Sig. (2-tailed)		.777	.638	.949	.196	.203	.214		.390	.092
N		5	5	5	5	5	5	5	5	4
Avg. Gini coefficient 2000-2003	N	7	7	7	7	6	7	5	7	5
Pearson Correlation		.423	.639	.561	.436	.908 <sup>b</sup>	-.296	-.501	1	-.108
Sig. (2-tailed)		.345	.122	.190	.328	.012	.519	.390		.863
N		7	7	7	7	6	7	5	7	5
Avg. Surplus Value 2000-2004	N	7	7	7	7	6	7	5	7	5
Pearson Correlation		.450	.179	.390	-.483	-.174	.525	.908	-.108	1
Sig. (2-tailed)		.447	.773	.516	.410	.780	.363	.092	.863	
N		5	5	5	5	5	5	4	5	5

<sup>a</sup> Correlation is significant at the 0.01 level (2-tailed).

<sup>b</sup> Correlation is significant at the 0.05 level (2-tailed).

Table 4 Comparison of Means by BLOC - Excluding "Other"

BLOC	Mean	Public Police	Private Security	Total Public and Private Policing	Unionization as% of pop.	Avg. Strikes & Lockouts 1990–2004	Manufacturing as% of total emp 2004	Avg. Manuf. Unemployment 2000–2004	Avg. Gini coefficient 2000–2003
East Bloc	Mean	363.0725	417.4223	780.4948	10.8778	.7248	31.5556	1.1623	29.5667
	N	9	9	9	9	6	9	8	9
	Std. Deviation	82.04101	219.93424	227.48035	3.5934	1.12993	7.51850	.41357	8.40536
Anglo-American	Mean	259.6557	327.4879	581.9406	10.8614	1.7159	22.8333	.3488	34.7167
	N	7	7	7	7	7	6	5	6
	Std. Deviation	41.28643	104.01037	135.12301	2.67969	1.62594	2.63944	.07612	6.50397
EU North	Mean	272.4723	180.8944	453.3667	25.6260	2.2761	24.3000	.4894	27.5600
	N	10	10	10	10	9	10	6	10
	Std. Deviation	79.22912	115.38404	161.98622	19.41212	4.24746	3.36815	.13857	3.02479
EU South	Mean	443.8832	195.6466	639.5298	9.0017	2.3667	27.2000	.4852	31.5000
	N	6	6	6	6	6	5	6	6
	Std. Deviation	20.97774	58.09322	51.99640	7.89131	.48988	3.96232	.15495	4.11437
USSR	Mean	620.6292	311.3540	920.6746	12.4886	1.1468	24.2857	.9404	41.4286
	N	7	7	7	7	6	7	5	7
	Std. Deviation	414.35933	132.60761	461.69616	8.65632	1.22023	8.86405	.35872	5.18032
Total	Mean	379.9402	287.4748	664.4514	14.6569	1.7037	26.2162	.7197	32.3421
	N	39	39	39	39	34	37	30	38
	Std. Deviation	217.78272	164.27240	286.99343	12.51643	2.38947	6.48989	.41928	7.38653

## Findings

We conduct our analysis on two levels. We first examine the correlation<sup>30</sup> of our variables at a global level, including all data points for all countries in which they are available. Second, we subdivide our sample into six parts based on regional variations. These divisions are based on sociopolitical and geographic considerations. Most importantly, former Stalinist states in the Baltic region significantly differ in their political and juridical history from Anglo-American countries, as do Northern European countries from former Eastern Bloc states. Table A (of the [Appendix](#)) outlines the categorization of our sample into country “BLOCs”. In most cases, differences between regions manifested in average differences between variables. Indeed, these regional variations between countries were statistically significant for seven of the nine variables considered (see Table 5). When divided in this manner, the sample for each BLOC becomes relatively small and the standard deviation increases considerably. For this reason, between-BLOC comparisons should be read with caution. Nonetheless, by creating these regional groups we were able to indentify former USSR countries for consistent conflating and countervailing statistical tendencies compared to the sample as a whole. This can most obviously be attributed to their recent emergence from Stalinist rule and the much greater relative size of their public policing sector (see Fig. 3). There is nothing in Marxian political economy that would privilege one level of analysis over the other. While the general tendencies of capital are indeed global [60, 160], they are everywhere subject to local “countervailing tendencies” and historical conditions [98].<sup>31</sup>

Public police employment was unrelated to private security employment ( $r^2 = .134$ ,  $n = 45$ ,  $p = ns$ ). This finding also held when post-USSR states were removed from the analysis ( $r^2 = .041$ ,  $n = 38$ ,  $p = ns$ ). In other words, there is no international pattern to the relative size of private and public policing employment. The size of one sector does not seem to affect the other on a cross-national basis. Of course, there is no reason that it should. From a critical political economy perspective, public or private police growth would be dependent on other exogenous socioeconomic factors and be subject to historical conditions. What matters most is to consider each sector and *combined* policing in terms of its relation to other variables such as inequality, labour unrest and manufacturing unemployment. Although not a subject of analysis for this paper, we checked for relationships between policing, property crime, violent crime and unionization, inequality, the extraction of surplus value and unemployment. Our analysis found no relationship between crime and our social and economic variables. This lack of relationship persisted even when we removed post-USSR states from the analysis. Despite these findings, caution should be exercised with these negative results. More sophisticated national and longitudinal analyses of the relationship between surplus-value and crime have yielded contrary results (see [91, 92]).

<sup>30</sup> We use a two-tailed analysis given the exploratory nature of this study – directionality is not presupposed.

<sup>31</sup> See Marx’s account of the “unfortunate Mr. Peel” who lost all of his servants upon his arrival to Australia because land was plentiful and free.

**Table 5** ANOVA

			Sum of Squares	df	Mean Square	F	Sig.
Public Police * BLOC	Between Groups (Combined)		649383.145	4	162345.786	4.788	.004
	Within Groups		1152930.770	34	33909.729		
	Total		1802313.915	38			
Private Security * BLOC	Between Groups (Combined)		331364.376	4	82841.094	4.058	.009
	Within Groups		694081.589	34	20414.164		
	Total		1025445.965	38			
Total Public and Private Policing * BLOC	Between Groups (Combined)		1077696.918	4	269424.229	4.464	.005
	Within Groups		2052181.858	34	60358.290		
	Total		3129878.776	38			
Unionization as% of pop. * BLOC	Between Groups (Combined)		1657.388	4	414.347	3.279	.022
	Within Groups		4295.728	34	126.345		
	Total		5953.116	38			
Avg. Strikes & Lockouts 1990–2004 * BLOC	Between Groups (Combined)		13.197	4	3.299	.546	.703
	Within Groups		175.218	29	6.042		
	Total		188.415	33			
Manufacturing as% of total emp 2004 * BLOC	Between Groups (Combined)		392.886	4	98.222	2.798	.042
	Within Groups		1123.384	32	35.106		
	Total		1516.270	36			
Avg. Manuf. Unemployment 2000–2004 * BLOC	Between Groups (Combined)		3.147	4	.787	10.079	.000
	Within Groups		1.951	25	.078		
	Total		5.098	29			
Avg. Gini coefficient 2000–2003 * BLOC	Between Groups (Combined)		914.046	4	228.512	6.826	.000
	Within Groups		1104.707	33	33.476		
	Total		2018.753	37			

Union membership was unrelated to policing employment, whether public, private or combined for all countries. But when post-USSR states were removed from the sample a statistically significant inverse relationship between private security ( $r^2 = -.324$ ,  $n = 38$ ,  $p < .05$ ) or total policing employment ( $r^2 = -.426$ ,  $n = 38$ ,  $p < .01$ ) and unionization appeared. Indeed, post-USSR states exhibit a contrary positive relationship between total police employment and unionization although this is not a statistically significant relationship ( $r^2 = .632$ ,  $n = 7$ ,  $p = ns$ ). This finding provides empirical evidence for the claim that unions may actually provide a surrogate policing function for capital in western nations. That is, a stronger union presence lessens the necessity for more policing. This is particularly evident among northern European (and Ghent countries) where the average unionization rate is 25.6%, the highest by far among all regions, but the average total policing rate is 453.4, the lowest among all regions. In former USSR countries, on the other hand, a high unionization rate (12.5%) coincides with more policing, particularly public policing (620.6) as the massive post-totalitarian apparatus has been largely maintained in the form of new protection rackets [153]. Eastern Bloc

states have also had to deal with similarly bloated post-totalitarian security structures but the average policing rate is 780.5 while the unionization rate is 10.9%.

While it would be tempting to view the inverse association between policing and unionization alone as the definitive indicator of trade-unions' de-radicalizing effect, i.e. unions are no more than police auxiliaries, a better assessment of union militancy is to directly test the average national strike and lock-out rate against union membership. We find here that union membership was positively correlated to the average number of strikes and lock-outs per 100,000 population in the 4 years up to and including 2004 ( $r^2=.438$ ,  $n=40$ ,  $p<.01$ ) and that this relationship held even when former USSR states were excluded ( $r^2=.421$ ,  $n=34$ ,  $p<.02$ ). In sum, it would seem that strikes and lock-outs do not significantly threaten capitalist relations when measured by the presence of policing but the absence of unions certainly do. This may be because unions are adept at policing their own actions. Since more labour unrest takes place in more heavily unionized countries yet this unrest does not necessitate further policing, trade unions may be providing an effective policing function for capital.

What labour militancy does seem to provide, however, is a reduction in the rate of exploitation as measured by the extraction of surplus-value. Thus, surplus-value is inversely correlated to strikes and lock-outs ( $r^2=-.436$ ,  $n=35$ ,  $p<.01$ ) even when post-USSR states are omitted ( $r^2=-.448$ ,  $n=30$ ,  $p<.02$ ). There is no direct relationship, however, between policing employment and strikes and lock-outs. This suggests that while strikes and lock-outs may not directly threaten capitalist relations as measured by the necessity to employ more police and security, such work interruptions do have a statistically significant impact in reducing rates of exploitation. As Marxian political economy would indicate, the data also suggest unions are adept at checking exploitation by pushing for more favourable wage and hourly conditions but this does not translate into any direct threat to the established order of security as indicated by more policing.

Combined unemployment including manufacturing, agriculture, services and public service and each sector individually (except for agriculture) was unrelated to policing employment (public or private). However, in keeping with Marxian notions of productive labour and the role of the IRA, manufacturing employment and unemployment proved an important exception. Manufacturing employment as a percentage of the workforce was positively correlated to private security employment ( $r^2=.342$ ,  $n=42$ ,  $p<.05$ ) and total policing employment ( $r^2=.331$ ,  $n=42$ ,  $p<.05$ ) whether or not former USSR states were excluded from the analysis. Private security employment ( $r^2=.430$ ,  $n=34$ ,  $p<.02$ ) and total police employment ( $r^2=.462$ ,  $n=35$ ,  $p<.01$ ) was also positively correlated to manufacturing unemployment again whether or not former USSR countries were excluded from the analysis. The positive relationship between manufacturing and policing, therefore, seems universal. Marx [98] argued that the service sector was so unsubstantial that it "could be left out of account entirely" and that all labour in the sphere of "circulation [is] merely [a] deduction from... productively expended capital" ([100]: 139).<sup>32</sup> The central corps of proletarian revolutionaries for Marx and the Marxists

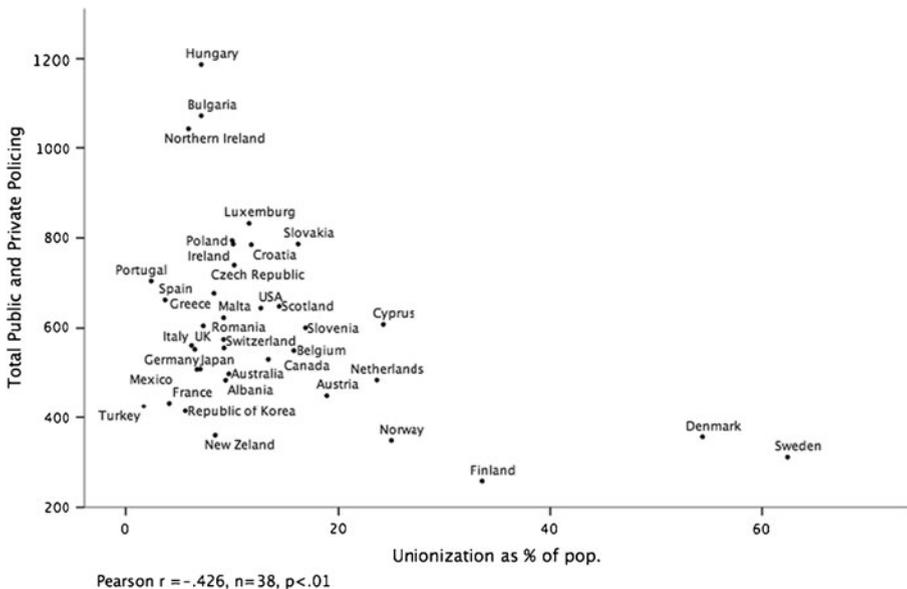
<sup>32</sup> For a thorough account of how Marx privileges the manufacturing sector as "productive" in the same way as Adam Smith did see Kushnirsky and Stull [80] and Leadbeater [82]. In short, Marx successively narrows his definition through exceptions and provisos despite initially railing against the fetish of valorizing material commodities.

are always imagined as emanating from the factory and mine. Thus, police employment figures are empirically linked to both the industrial proletariat and the IRA (see Fig. 1).

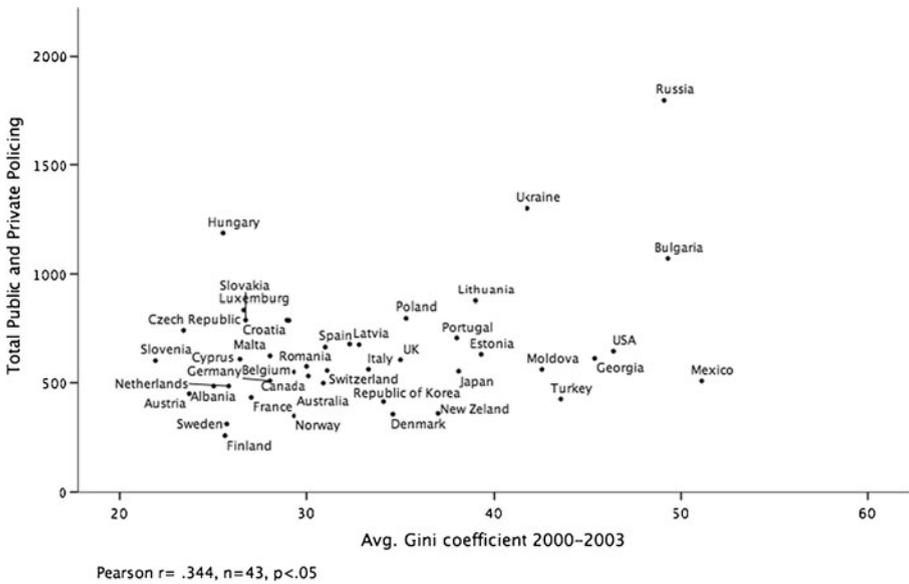
Domestic inequality as measured by the Gini coefficient was statistically significantly correlated to total policing employment ( $r^2=.344$ ,  $n=43$ ,  $p<.05$ ) but this positive relationship disappeared when post-Soviet countries were excluded (see Fig. 2). Marx's notion of relative deprivation describes an increasing sense of discomfort and dissatisfaction among workers with the rise of domestic inequality. We have interpreted this as part of Marx's general theory of exploitation and, of course, proletarian immiseration. As a barometer of bourgeois insecurity, therefore, a positive relationship between policing and income inequality confirms the Marxist position about the class-based role of policing (see [111]) above and beyond its direct relationship to labour. In either case, whether to assist in securing property relations during increased relative deprivation or to perform as direct overseers and intensifiers of workplace exploitation, we would expect to see a positive correlation between inequality and total policing employment according to tenets of Marxian political economy.

## Discussion

Our analysis has reaffirmed the central tenets of a Marxian political economy of policing in two fundamental ways. First, if we are to treat total policing employment as an empirical barometer of bourgeois insecurity then this insecurity is conditioned by two elements of Marxian political economy: (1) relative deprivation (income inequality) and (2) the rise of an IRA (manufacturing employment and unemployment). Second, while surplus value and labour militancy (strikes and lockouts per



**Fig. 1** Total policing by unionization excluding former USSR countries



**Fig. 2** Total policing by inequality

100,000 population) rise along with union membership, the presence of higher rates of unionization appears to ameliorate the need for more policing in all but post-Stalinist countries. While unions assist in checking the immiseration of workers through labour actions, union membership is nonetheless inversely correlated to policing employment, giving credence to the Marxian idea that while unions check the tendency of the depreciation of workers' labour, they also act as lieutenants of capital, performing an essential policing function.

The conservative role of unions has been highlighted in the new Marxian and anarchist literatures on “new social movements” (e.g. [32, 60, 81]). Recent clashes between police and demonstrators at ceremonial gatherings of corporate and state elites (e.g. WTO, G8, G10, APEC...etc.) have shown that union leaders are at pains to distinguish their supposedly “lawful” and “orderly” protests from those of more riotous radicals. Unions literally march in lock-step with police definitions of acceptable dissent and accept arbitrary urban demarcations of permissible protest space to reinforce their non-radical stance [44]. Today, demonstrations that include the presence of major trade unions involve uniformed leaders who steer, direct, and reprimand members who deviate from the route or engage in direct action. Bedecked in fluorescent vests and hats, union “marshalls” are thus physically policing their members in direct aid of riot police in ways Marx and Engels could never have imagined.

While there are plenty of examples from recent protests, France and Greece stand out. In recent years, both France and Greece have experienced riots that were long-lasting and violent. In contrast to the protests of previous decades, these recent riots were not initiated by the labour movement or prompted by scheduled ceremonial gatherings of global elites, but triggered by confrontations between youth and police. The 2005 civil unrest in France was sparked by the accidental death of two French

teenagers of Malian and Tunisian descent as they fled the police in *Clichy-sous-Bois*. Their deaths were followed by three weeks of rioting that involved the burning of cars and public buildings, and violent attacks towards police and fire fighters.<sup>33</sup> The rioters were mostly unemployed youth and immigrant groups from the suburban ghettos of France. The festering resentment in the ghettos burst into flames,<sup>34</sup> albeit it was, as Žižek put it, an “outburst with no pretense to any kind of positive vision.”<sup>35</sup>

A year later, another riot occurred in France which lasted longer than the 2005 civil unrest.<sup>36</sup> The 2006 youth protests occurred throughout the country as an opposition to the new labour law (First Employment Contract) whose goal was to reduce high youth unemployment through giving more flexibility to employers. In other words, the bill was to make it easier for employers to fire young workers without any compensation. Consequently, the youth responded to this bill by demonstrating on the streets, occupying universities, and blocking university activities including strikes. The insistence of youth in their opposition to the First Employment Contract eventually brought them support from unions.<sup>37</sup> But why did the trade-unions not resist such a bill in the first place? How would the unions have acted had the youth not challenged the First Employment Contract? The unions’ (overly) cautious attitude in responding to issues concerning the labour market and the vested rights of workers is one of the most overt examples of their “policing” role in society. Perhaps the low employment<sup>38</sup> and unionization rates among Parisien youth made them unrestrained by union membership, necessitating massive police intervention.

Similar to the 2005 riots in France, the police killing of a 15 year-old student in Greece resulted in a period of fierce riots lasting over three weeks starting on December 6, 2008. Protests started immediately in Athens after the shooting incident and spread to other cities in a matter of days. Riots consisted of vandalizing cars, burning public and private buildings, attacking and injuring police officers, and occupying universities. Not only were the methods that were used in the Greek riots of 2008 similar to the 2005 riots in France but so were the reasons behind the riots (unemployment, economic stagnation, rising poverty), and the participants in the riots were mostly youth, unemployed, and poor. There was no official union involvement during the 2008 riots in Greece, but some workers were involved. The building of the General Confederation of Greek Workers was occupied by militant members “to counteract the designs of the union bureaucracy, to distance its membership from the current revolt, and protest its management and mediation of workers’ struggles in Greece.”<sup>39</sup> In their Declaration, the occupants of the

<sup>33</sup> Peter Sahlins. 2006. “Civil unrest in the French suburbs, November 2005” Social Science Research Council <<http://riotsfrance.ssrc.org/>> (Posted: Oct. 24, 2006)

<sup>34</sup> Doug Ireland. 2005. “Why is France burning?” Zmag.org <<http://www.zmag.org/znet/viewArticle/5076>> (Posted: Nov. 6, 2005)

<sup>35</sup> Slavoj Žižek. 2005. “Some politically incorrect reflections on the violence in France” *Multitudes: Revue Politique, Artistique, Philosophique*. <<http://multitudes.samizdat.net/Some-politically-incorrect.html>> (Posted: Nov. 21, 2005)

<sup>36</sup> The riots of 2006 started in February and continued through March and April.

<sup>37</sup> Staff. 2006. “French protesters rally against labour law” *The Guardian.com* <<http://www.guardian.co.uk/world/2006/mar/28/france>> (Posted: Mar. 28, 2006)

<sup>38</sup> The OECD reports that France’s youth (15–24) unemployment rate was 20% in 2009.

<sup>39</sup> Django. 2008. “Workers in Greece occupy union offices” (Posted: Dec. 17, 2008) *Libcom.com*. <<http://libcom.org/news/greek-workers-occupy-union-offices-17122008>>

GCGW, namely, the General Assembly of Insurgent Workers called on “manual labourers, employees, jobless, temporary workers, locals and migrants” to protest against the union bureaucracy, the capitalists, and the capitalist state in the aftermath of the shooting incident. In this Declaration, trade-union representatives were categorized alongside the police and capitalists; the destruction of the trade-union mechanism in its entirety was set as a goal and labourers were called into work to make their own history.<sup>40</sup> It should come as no surprise by now that France and Greece have among the highest rates of total policing employment in Europe.

As new austerity measures grip the Eurozone (and particularly its periphery states) in the wake of massive bailouts, the threat of default, and severe public and private sector lay-offs, there have been no announcements concerning cut-backs to the policing, military and security sectors. As these developments continue to unfold we would be well advised to continue to examine the broad political economy that subtends these relations of police and capital and the projects of pacification they elicit [127]

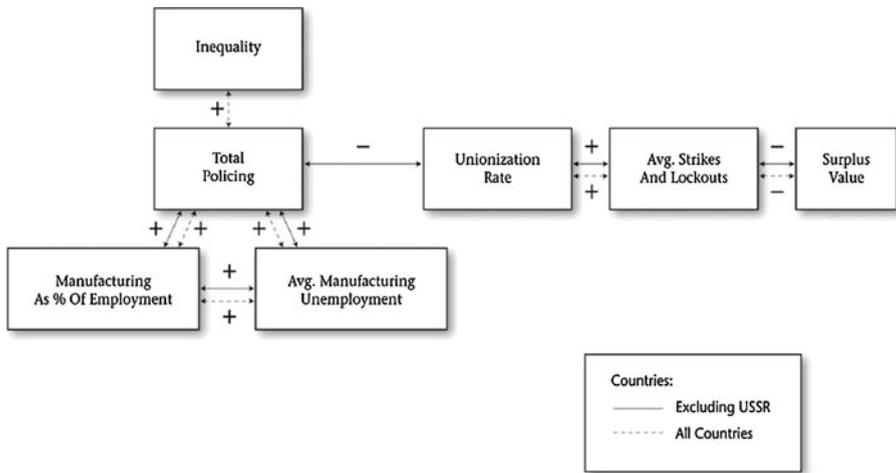
## Conclusions

In Fig. 3 we have mapped out the beginnings of an empirically-informed Marxian political economy of policing. We have assessed the general tenets of our Marxian perspective and have found them prophetic of conceptual relationships long assumed but never systematically tested by scholars. These findings are quite remarkable. They are based on theory that is over a century-and-a-half old and on data that cut across 45 national contexts, often involving significant differences in legal structure, socioeconomic development, ethnic composition and historical development. To find persistent empirical relationships despite such breadth of space and time is, in our view, profoundly significant for the continued development of a Marxian political economy of policing and for policing research in general.

Despite these results, however, more scholarship is needed to expand this research in at least four possible trajectories. First, longitudinal national research would be best able to track changes over time, further test the tenets put forward in this paper and specifically mark the impact of neoliberal restructuring on national economies and policing employment. As time passes more reliable historical policing and economic indicators are becoming available thanks to retrospective statistical reconstructions.<sup>41</sup> Second, the variables organized in Fig. 3 cannot be exhaustive of the relationships necessary for a full understanding of the political economy of policing. For example, the impact of political freedom, social security, net migration, and racial heterogeneity among others are factors that may be considered for inclusion in subsequent studies. Third, even as we write this paper, data on policing employment and other economic indicators are being released by countries included in our sample. As more countries fall within the rubric of trade associations such as the OECD or the EU, statistical reporting becomes standardized and mandated,

<sup>40</sup> Django. 2008. “Workers in Greece occupy union offices” (Posted: Dec. 17, 2008) <<http://libcom.org/news/greek-workers-occupy-union-offices-17122008>>

<sup>41</sup> The World Income Inequality Database is a good example. It contains inequality data that tracks back to the turn of the century.



**Fig. 3** Correlation diagram

increasing the reliability of the data and the number of contributing countries. Future studies should re-test our findings and our relational model using more recent data. Fourth, in keeping with this statistical expansion it is incumbent on future researchers to try to include developing and/or divided societies. Such countries, some still in a pseudo-colonial or exploitive relationships with wealthier countries may add significantly to the development of an inclusive model.

## Appendix

**Table 6** Country designations by BLOC

BLOC	Countries
Eastern Bloc	Albania, Bulgaria, Croatia, Czech Republic, Hungary, Poland, Romania, Slovakia, Slovenia
Anglo-American	Australia, Canada, Ireland, New Zealand, United Kingdom, Scotland, United States of America
EU North	Austria, Belgium, Denmark, Finland, France, Germany, Luxemburg, Netherlands, Norway, Sweden
EU South	Cyprus, Greece, Italy, Malta, Portugal, Spain
USSR	Estonia, Georgia, Latvia, Lithuania, Moldova, Russia, Ukraine
Other	Japan, Mexico, Republic of Korea, Switzerland, Turkey, UK: Northern Ireland (divided society)

### 2004 Public Police:

Albania, Croatia, Italy, Moldova, Northern Ireland Romania, Scotland, Russia, Turkey: *European Sourcebook of Crime and Criminal Justice Statistics*, 2006. 2006. Third Edition (revised). Den Haag: Boom Juridische Uitgevers.

Austria, Belgium, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Latvia, Lithuania, Luxemburg, Malta, Netherlands, Poland, Portugal, Slovakia, Slovenia, Spain, Sweden: *Confederation of European Security Services*. 2004. Accessed on May 05, 2010, from Private Security Statistics, Panoramic Overview of the Private Security Industry in the 25 Member States of the European Union (PDF 1-2-3) 2004: <http://www.coess.org/stats.htm>

Australia: The Yearbook of Australia. 2006. *The Australian Bureau of Statistics*, ABS Catalogue No. 1301.0.

Bulgaria: SAWL and Private Security Companies in the South Eastern Europe: A Cause and Effect of Insecurity?. 2005. Second Edition, *SEESAC*.

The Republic of Korea: *Korean National Police Agency*. 2009. Accessed on April 27, 2010, from KNPA: [http://www.police.go.kr/KNPA/statistics/st\\_administration\\_03.jsp](http://www.police.go.kr/KNPA/statistics/st_administration_03.jsp)

Turkey: 2004 police numbers are provided by Professor Yusuf Ziya Ozcan on August 15, 2007 via email.

### 2004 Private Security:

Albania and Moldova: SAWL and Private Security Companies in the South Eastern Europe: A Cause and Effect of Insecurity?. 2005. Second Edition, *SEESAC*.

Australia: Prenzler, T., Sarre, R. and Earle, K. 2008. Developments in the Australian Private Security Industry. *Flinders Journal of Law Reform* 10 (3): 403–417.

Austria, Belgium, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxemburg, Malta, Netherlands, Poland, Portugal, Slovakia, Slovenia, Spain, Sweden: *Confederation of European Security Services*. 2004. Accessed on May 05, 2010, from Private Security Statistics, Panoramic Overview of the Private Security Industry in the 25 Member States of the European Union (PDF 1-2-3) 2004: <http://www.coess.org/stats.htm>

Bulgaria, Croatia, Romania: *Confederation of European Security Services*. Accessed on January 6, 2008, from 2006–2007 COESS Listing: <http://www.coess.org/stats.htm>

The Republic of Korea: Button, M., and Park, H. 2010. Security Officers and the Policing of Private Space in South Korea. *Police and Society* 19 (3): 247–262.

Russia: Volkov, V. 2000. Between Economy and the State: Private Security and Rule Enforcement in Russia. *Politics & Society* 28 (4): 483–501.

Turkey: Bozkurt, H. (2007, July 09). *SPNTR.net*. Accessed on July 11, 2007, from <http://www.spntr.net/content/view/4964/>

UK: Scotland: General Register Office for Scotland 2001 Census of Population (August 7, 2007). (The excel document is sent to us by Tom Hogg, Table Development/ Customer Service Officer of General Register Office for Scotland on August 7, 2007)

UK: Northern Ireland: *Department of Enterprise, Trade and Investment*. Northern Ireland Census of Employment. (September 2003), Accessed on March 19, 2008, from <http://www.detini.gov.uk/deti-stats-index.htm>

Ukraine: Hiscock, D. 2006. The Commercialization of Post-Soviet Private Security. In *Private Actors and Security Governance*, ed. Alan Bryden and Marina Caparini, pp. 129–148, Zurich: Lit Verlag.

NOTE: The number for private security in 2006 per 100,000 population is calculated as a total of PSCs and DSOs—a hybrid, part government and part entrepreneurial activity. The DSOs activities are financed by the payment of its

services on a contractual basis. Although the DSO's operations are not intended to make profit, it provides and charges for the same services as would a private security company. When Hiscock talks about the "commercialised security sector," he includes both PSCs and DSOs.

## 2004 Public and Private Police:

Canada: Labor Force Survey. 2007. *Statistics Canada*. (Data obtained through a "custom run" of the Statistics Canada census and labour database).

Georgia: Hiscock, D. 2006. The Commercialization of Post-Soviet Private Security. In *Private Actors and Security Governance*, ed. Alan Bryden and Marina Caparini, pp. 129–148, Zurich: Lit Verlag.

Japan: Yoshida, N. and Leishman, F. 2006. Japan. In *Plural Policing*, ed. Trevor Jones and Tim Newborn, pp. 222–239, London: Routledge.

Mexico: Reames, B. 2003. Police Forces in Mexico: A Profile. Presented at the conference Reforming The Administration of Justice in Mexico, at the Center for U. S.-Mexican Studies.

New Zealand: *Statistics New Zealand (Tatauranga Aotearoa)*. Accessed on April 25, 2010, from 2006 Census Data, Classification Count Tables, Occupation (ANZSCO V.1.0): <http://www.statistics.govt.nz/Census/2006CensusHomePage/classification-counts-tables/about-people/~media/Statistics/Publications/Census/2006reports/Classification-Count-Tables/People/occupation.ashx>

NOTE: This data is revised on 28 February 2007, but the codes and categorizations changed which did not affect the numbers very much. The revised version is available on <http://www.statistics.govt.nz/Census/2006CensusHomePage/classification-counts-tables/about-people/~media/Statistics/Publications/Census/2006-reports/Classification-Count-Tables/People/occupation-revised>.

Norway: *Statistics Norway (Statistisk sentralbyrå)*. Accessed on March 18, 2008, from StatBank, 06 Labour Market, Wages; Employment, Main Figures, Table: 04858 Employed persons, per 4<sup>th</sup> quarter, by occupation and sex: [http://statbank.ssb.no/statistikkbanken/Default\\_FR.asp?Maintable=SysseIYrkeKj02&PLanguage=1&nvl=true&PXSid=0&tilside=selectvarval/define.asp&direkte=1](http://statbank.ssb.no/statistikkbanken/Default_FR.asp?Maintable=SysseIYrkeKj02&PLanguage=1&nvl=true&PXSid=0&tilside=selectvarval/define.asp&direkte=1)

Switzerland: BFS Bundesamt für Statistik, 1995–2005, establishments and employees in Switzerland by NOGA 74.60A and 75.24A (this information is sent by Kurt Wuethrich via email).

UK: Louca, B. (March 18, 2008). *Office for National Statistics*. Accessed on May 5, 2010, from Labour Force Survey: employment by occupation and sex, April-June 2004: <http://www.statistics.gov.uk/STATBASE/Product.asp?vlnk=14248>

USA: *Bureau of Labour Statistics*. (November 9, 2005). Accessed on March 19, 2008, from Occupational Employment Statistics: [http://www.bls.gov/oes/2004/November/oes\\_nat.htm](http://www.bls.gov/oes/2004/November/oes_nat.htm)

NOTE: For all the countries—except the ones whose data are retrieved from European Sourcebook—both public and private police numbers per 100,000 population are calculated by the authors.

Public Police: For Albania, Croatia, Italy, Romania and Scotland, public police data for 2002; for Moldova and Russia, 2000; for Northern Ireland, Bulgaria, Mexico, 2003; for Georgia and Switzerland, 2005; for New Zealand, 2006, data is moved to 2004.

Private Police: For Russia private police data are for 1999; for Mexico, 2000; for Scotland, 2002; for the Republic of Korea and Northern Ireland 2003; for Georgia, Moldova and Switzerland 2005; for Australia, Bulgaria, Croatia, New Zealand, Romania and Ukraine 2006 data is moved to the base year 2004. For Turkey, the police number for base year 2004 is calculated as a mean of available data for 2003 and 2006.

## Trade Union Membership

Belong to labour unions:

Albania, Bulgaria, Croatia, Czech Republic, Hungary, Poland, Romania, Slovakia, Slovenia, Canada, Ireland, United Kingdom, USA, Austria, Belgium, Denmark, Finland, France, Germany, Luxemburg, Netherlands, Poland, Sweden, Greece, Italy, Malta, Portugal, Spain, Estonia, Latvia, Lithuania, Russia, Ukraine, Japan, Mexico, Republic of Korea, Turkey, Northern Ireland: *World Values Database*. The Fourth Wave (1999–2004).

Trade union membership as per cent of population:

Australia, New Zealand, Norway, Switzerland: *OECD*. Accessed on July 9, 2007, from OECD. Stats. Extracts, Labour, Trade-Union, Union Members and Employees: [http://stats.oecd.org/Index.aspx?datasetcode=SNA\\_TABLE1](http://stats.oecd.org/Index.aspx?datasetcode=SNA_TABLE1)

Cyprus: Carley, M. May 25, 2004. *European Foundation for the Improvement of Living and Working Conditions*. Accessed on April 27, 2010, from European Industrial Relations Observatory Online: <http://www.eurofound.europa.eu/eiro/2004/03/update/tn0403105u.htm>

Georgia: *Georgian Trade Unions' Confederation*. Accessed on May 6, 2010, from GTUC: <http://www.gtuc.ge/cms/>

Moldova: Monteanu, I. 2000. Trade Unions in Moldova: on cusp of change or collapse? *South-East Europe Review for Labour and Social Affairs* 2: 87–96. Available at [www.ceeol.com](http://www.ceeol.com) [Accessed on May 2, 2010].

Scotland: Achur, J. 2010. *Department for Business Innovation and Skills (BIS)*. Accessed on May 1, 2010, from Employment Market Analysis and Research, Trade-Union Membership Statistics: <http://www.bis.gov.uk/policies/employment-matters/research/trade-union-stats>

NOTE: Trade-union membership data as per cent of population is calculated by the authors. For Norway and Switzerland, union membership data for 2001; for Cyprus 2003; for Georgia 2009; for Moldova 2000, is moved to 2002.

Trade-Union Density as per cent of population:

Australia, Austria, Belgium, Canada, Cyprus, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Japan, Republic of Korea, Luxemburg, Mexico, Netherlands, Norway, Poland, Portugal, Slovakia, Spain, Sweden, Switzerland, Turkey, UK, USA: Trade Union Density (%) in OECD countries, 1960–2007. Accessed on April 27, 2010, from Data OECD: [www.oecd.org/dataoecd/25/42/39891561.xls](http://www.oecd.org/dataoecd/25/42/39891561.xls)

## Number of Strikes and Lockouts per 100,000 population as Average of 1990–2004:

Australia, Austria (1990–2002), Belgium (1990–2000), Canada, Cyprus, Czech Republic (1991–1996), Denmark, Estonia (1992–2004), Finland, France, Greece

(1990–2001), Hungary (1991–2004), Ireland, Italy, Japan, Latvia (2005–2008), Lithuania (2000–2004), Luxemburg (1990–1993), Malta (missing 1999), Mexico, Moldova (1990–1997), Netherlands, New Zealand, Norway, Poland, Portugal, Republic of Korea, Romania (1992–2004), Russia, Slovakia, Spain, Sweden, Switzerland, Turkey, UK, Ukraine, USA: *International Labour Organization (ILO)*. Accessed on April 29, 2010, from LABOURSTA Internet, Strikes and Lockouts: <http://laborsta.ilo.org/STP/guest>

Slovenia (1999–2000): Tóth, A., and Neumann, L. September 2, 2003. *European Foundation for the Improvement of Living and Working Conditions*. Accessed on April 27, 2010, from European Industrial Relations Observatory Online: <http://www.eurofound.europa.eu/eiro/2003/01/study/tn0301101s.htm>

Northern Ireland and Scotland (2002–2004):

Mackinnon, N. June 2003. *National Statistics: Labour Market Trends* 111 (6):261–320.

Mackinnon, N. June 2004. *National Statistics: Labour Market Trends* 112 (6):209–256.

Mackinnon, N. June 2005. *National Statistics: Labour Market Trends* 113 (6): 213–260.

[Available at *National Statistics*. Accessed on May 2, 2010, from Labour Market Trends Archive: <http://www.statistics.gov.uk/about/platforms/lmt/>]

### **Unemployment Rate as percentage of total labour force:**

Albania, Australia, Georgia, Mexico, Moldova, New Zealand, Republic of Korea, Russia, Switzerland, Ukraine: *International Labour Organization (ILO)*. Accessed on May 22, 2008, from LABOURSTA Internet, Unemployment: <http://laborsta.ilo.org/STP/guest>

Northern Ireland and Scotland: *Office for National Statistics*. Accessed on May 22, 2008, from Official Labour Market Statistics: <https://www.nomisweb.co.uk/Default.asp>

Belgium, Bulgaria, Czech Republic, Denmark, Germany, Estonia, Finland, Ireland, Greece, Spain, France, Italy, Cyprus, Latvia, Lithuania, Luxemburg, Hungary, Malta, Netherlands, Austria, Poland, Portugal, Romania, Slovakia, Slovenia, Sweden, UK, Croatia, Turkey, Norway, Japan: *Eurostat*. Accessed on May 23, 2008, from Labour Market, Employment and Unemployment: [http://epp.eurostat.ec.europa.eu/portal/page/portal/labour\\_market/introduction](http://epp.eurostat.ec.europa.eu/portal/page/portal/labour_market/introduction)

USA: *Bureau of Labour Statistics*. Accessed on May 19, 2008, from Labour Force Characteristics: <http://www.bls.gov/cps/lfcharacteristics.htm#unemp>

NOTE: Unemployment rate as percentage of total labour force is calculated by the authors. Economically active population (total labour force) is used in calculations.

Economically Active Population:

*The World Bank*. Accessed on May 25, 2008, from World Development Indicators Online (WDI): <http://ddp-ext.worldbank.org.proxy.library.carleton.ca/ext/DDPQQ/member.do?method=getMembers&userid=1&queryId=6>

### **Unemployment in Manufacturing**

Australia, Austria, Belgium, Bulgaria, Canada, Croatia, Cyprus, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Italy, Japan, Republic of

Korea, Latvia, Lithuania, Malta, Mexico, Moldova, New Zealand, Poland, Portugal, Romania, Russia, Slovakia, Slovenia, Spain, Sweden, Turkey, Ukraine, UK, USA: *International Labour Organization (ILO)*. Accessed on February 20, 2008, from LABOURSTA Internet, Unemployment, by economic activity: <http://laborsta.ilo.org/STP/guest>

NOTE: The numbers for unemployment in manufacturing are retrieved from LABOURSTA Internet and the percentage of unemployment in manufacturing is calculated in using the numbers for economically active labour force.

Employment in Manufacturing as percentage of total employment:

*The World Bank*. Accessed on May 25, 2008, from World Development Indicators Online (WDI): <http://ddp-ext.worldbank.org.proxy.library.carleton.ca/ext/DDPQQ/member.do?method=getMembers&userid=1&queryId=6>

### **The Rate of Surplus Value (2000–2004):**

Value-added: Manufacturing, value-added (current US\$): *World Development Indicators*. The World Bank. [Data is sent to us via email by Beatriz Prieto-Oramas (Client Services and Communications, The World Bank) on February 11, 2008].

Annual Earnings of Manufacturing Workers: Calculated by using the variables of total employment by economic activity (manufacturing), wages in manufacturing, hours of work in manufacturing: *International Labour Organization (ILO)*. Accessed on February 20–28, 2008, from LABOURSTA Internet, Wages in manufacturing: <http://laborsta.ilo.org/STP/guest>

### **Exchange Rates:**

Albanian Lek and Moldovan Leu: Wikipedia. Accessed on February 26, 2008, from Tables of Historical Exchange Rates to the USD: [http://en.wikipedia.org/wiki/Table\\_of\\_historical\\_exchange\\_rates](http://en.wikipedia.org/wiki/Table_of_historical_exchange_rates)

Australian Dollar, Canadian Dollar, Bulgarian Lev, Croatian Kuna, Czech Koruna, Estonian Kroon, Hungarian Forint, Japanese Yen, Latvian Lat, New Zealand Dollar, Norwegian Krone, Polish Zloty, Korean Won, Romanian Leu, Slovak Koruna, Slovenian Tolar, UK pound sterling, US dollar: European Central Bank. Accessed on February 23, 2008, from Statistical Data Warehouse, Exchange Rates, Bilateral: [http://sdw.ecb.europa.eu/browseTable.do?DATASET=0&CURRENCY=USD&node=2018794&FREQ=A&SERIES\\_KEY=120.EXR.A.USD.EUR.SP00.A](http://sdw.ecb.europa.eu/browseTable.do?DATASET=0&CURRENCY=USD&node=2018794&FREQ=A&SERIES_KEY=120.EXR.A.USD.EUR.SP00.A)

NOTE: Data for Australia, Canada, Greece and Switzerland is moved from 2002 to 2003. Data for New Zealand and Turkey is moved from 2001 to 2003.

### **Relative Deprivation (Gini Coefficients):**

Australia, Austria, Belgium, Bulgaria, Canada, Czech Republic, Denmark, Estonia, Finland, France, Georgia, Germany, Greece, Ireland, Italy, Latvia, Lithuania, Luxemburg, Mexico, Moldova, Netherlands, New Zealand, Norway, Poland, Russia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey, UK, Ukraine, USA: World Institute for Development Economics Research. Accessed on February 4, 2008, from

WIDER World Income Inequality Database (WIID2C): [http://www.wider.unu.edu/research/Database/en\\_GB/wiid/](http://www.wider.unu.edu/research/Database/en_GB/wiid/)

Albania, Croatia, Cyprus, Hungary, Republic of Korea, Romania: *International Labour Organization (ILO)*. Accessed on February 3, 2008, from LABOURSTA Internet, Household Income and Expenditure Statistics (HIES): <http://laborsta.ilo.org/STP/guest>

Japan, Malta, Portugal, Turkey: *Central Intelligence Agency*. Accessed on February 3, 2008, from The World Factbook, Distribution of Family Income, Gini Index: <https://www.cia.gov/library/publications/the-world-factbook/fields/2172.html>

NOTE: Data for Albania, Australia, Czech Republic, Denmark, Estonia, France, Georgia, Italy, Japan, Latvia, Lithuania, Mexico, Moldova, Norway, Poland, Russia, Slovak Republic, Slovenia, Spain, Sweden, Switzerland, UK and Ukraine is moved from 2002 to 2003; for Austria, Belgium, Bulgaria, Greece, Luxemburg and Netherlands, data is moved from 2001 to 2003; for Canada it is moved from 2000 to 2004; for Malta and Portugal it is moved from 2005 to 2003; for New Zealand it is moved from 1997 to 2003.

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