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Worker retraining and transfer payments

The political economy of social protection

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Abstract: We conduct an incentive-theoretical analysis of political economy considerations in the design of social protection programmes in developing countries to accompany economic reforms. We focus on two aspects of social protection—the provision of redistribution and retraining—that arguably characterize many reform packages. We analyse the interaction of compensatory redistribution and retraining programmes, and demonstrate that the provision of redistributive programmes might distort incentives for individuals to undertake worker retraining. This disincentive effect can be large enough to *politically* derail the passage of even those reform policies that are expected to increase output and to benefit a majority of the population. Conversely, it may be possible for an economic reform to win political support in the absence of compensatory redistribution. Thus we suggest that a ‘political failure’ may occur due to the complex interaction between the political and economic incentives created by these programmes.

Keywords: political economy, social protection, transfer payments, reform, redistribution, compensation

JEL classification: D72, D78, D04, J65, P16, H23

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1 Introduction

There is now a significant and growing literature, especially in international economics, on the effects of globalization and the adjustment costs that it imposes on workers displaced by the pressure of competition from imports. As Artuc et al. (2008, 2010) have argued, the quite substantial adjustment costs that displaced workers have to incur in trying to relocate away from shrinking import-competing sectors have traditionally been underestimated.¹ At the same time, there has been increasing recognition of the political necessity of implementing social protection programmes ‘which protect individuals against the negative consequences of shocks in general and external shocks in particular’ (Mitra and Ranjan 2011: 199). More generally, it is widely recognized that any (large-scale) economic reform is likely to entail the (large-scale) displacement of workers. Indeed, the political stresses created by these involuntary displacements and possible unemployment are arguably the single greatest impediment to the implementation of such reforms.

A common prescription for the amelioration of these stresses is to include in the reform implementation (some combination of) programmes such as worker retraining and compensation payments in the form of transfer payments (Lake and Millimet 2014; Scarpetta 2014). In this paper we take a political economy approach to the analysis of these programmes and the trade-offs, if any, in their use. Social protection policies encompass a wide range of programmes, such as income transfers (unconditional and conditional), worker retraining, employment protection, and public works programmes, to name but a few. For analytical clarity, we focus on two aspects—redistribution and retraining—that might reasonably be argued to characterize many reform packages. More specifically, we focus on (potential) worker displacement, which may be caused by a broad class of economic actions that we group under the rubric of ‘economic reform’.

We analyse the interaction of compensatory redistribution and retraining programmes, and we demonstrate that the provision of redistributive programmes might distort incentives for individuals to undertake worker retraining. This insight is well understood—the provision of unemployment insurance, for example, might delay the costly adjustments that workers need to make. The new insight here is to show that this disincentive effect can be large enough to *politically* derail the passage of reform policies. The tension here—between the disincentive effects that redistributive programmes have on retraining efforts, and the social protection aspect of those redistributive programmes—is political. Governments are typically limited in their ability to implement ‘purely redistributive’ policies due to political exigencies. The interaction of these political limits to redistribution, on the one hand, and the imposition of complementary investments by displaced workers, on the other hand, may complicate matters even further. This tension might be dubbed a ‘political redistributive burden’ effect: if this redistribution is financed by taxing the winners, then that narrows the gap between winners and losers, and may even make the whole reform policy sufficiently less attractive as to lose *political* support. Hence, we argue, there is potentially a particular kind of ‘political failure’ that may occur.

We take a deliberately agnostic approach to the reform under consideration. Thus the source of the worker displacement could be one (or more) of a number of possible economic policies: trade liberalization, which changes the relative prices of different goods produced in different sectors, as in the seminal Fernandez and Rodrik (1991) paper; or a reorientation of government

¹ See also the discussion in Blanchard and Willmann (2011, 2016), who suggest that the uncertainty associated with the adjustment process creates its own complications, and might for example affect the skill acquisition decisions of younger cohorts.

infrastructure spending away from less productive sectors towards more productive sectors (Jain and Majumdar 2017; Jain and Mukand 2003). The features common to all these policies are that (1) they are expected to be economically beneficial, in the sense that they (are expected to) increase real income in the economy—otherwise one might reasonably question the application of the label of ‘reform’; (2) they are expected to have distributional consequences, specifically for labour employment, that are likely to be asymmetrical across different sectors and indeed different actors.

It is on this latter aspect that we focus in this paper: the potential displacement and relocation of workers, and the impact on their wages, may be non-uniform across workers, even within the same sector. Virtually all reforms (or indeed any large-scale economic upheaval) share the feature that the impact across workers is ‘non-uniform’. An obvious implication is that social protection programmes designed to cushion the negative impact must take into account that a ‘one-programme-fits-all’ strategy is unlikely to be appropriate for all displaced workers. It is this implication, in particular, that we examine more closely in the theoretical model in section 3 below.

An important feature of this analysis is that the effect on workers is usually characterized by ‘individual-specific uncertainty’: although the aggregate effects of the programme(s) are known, the effect on any particular worker is not certain, even to that worker. In a widely cited paper, Fernandez and Rodrik (1991) have shown that even reforms that appear to be obvious candidates for passage may be voted down under certain conditions. Specifically, they consider reforms that are (1) economically ‘output-expanding’, in the sense that the ‘national pie’ will expand, even though the size of the ‘slice’ that some workers receive might change for the worse; and (2) ‘majority-benefiting’, in the sense that a majority of the population is expected to benefit from the reform. In a straight up-or-down referendum, with risk-neutral workers, these reforms would appear to be obvious candidates for passage: not only is the average income expected to rise, but a majority stands to benefit from the passage of the reform. Remarkably, however, they show that even these reforms might fail to win majority support. The key point is that all the ‘winners’ from the reform are not known in advance, so that at least some workers face ‘individual-specific uncertainty’.

However, Fernandez and Rodrik (1991) assume that redistribution from ‘winners’ to ‘losers’ is not possible. At first blush, it may appear that government promises to compensate losers by redistributing the gains of the winners might enable the passage of all output-expanding, majority-benefiting reforms. However, we show in a series of papers (Jain et al. 2014; Jain and Majumdar 2016; Jain and Mukand 2003) that even redistributive promises by the government may be insufficient to ensure the passage of majority-benefiting, output-expanding economic reform. The model presented here extends that research agenda by considering the effect that redistribution might have on voters’ incentives, and whether the political feasibility of reform is in fact enhanced by these redistributive mechanisms.

The rest of the paper is organized as follows. In the next section, we briefly discuss the few papers in the literature on which this paper builds. In section 3, we construct a simple framework to model the interaction between social protection programmes and political support for economic reform. Section 3.1 lays out the model, and section 3.2 describes the main results. Section 4 contains a brief discussion of possible extensions, and section 5 concludes.

2 Background and related literature

Why is redistribution so hard to implement? An enduring puzzle in the policy reform process is the inability of potential winners from the reform to promise compensation to the potential losers

in order to win support for the passage of those reforms. One answer to this puzzle (Jain and Mukand 2003) is that redistributive promises have to be *credible*—and there is now a large literature that argues that governments face credibility problems similar to those that private agents face. We have suggested that a government has a ‘time consistency’ problem: its idea of what the ‘best’ policy is might change (even in the absence of new information) from one period to the next, driven by concerns about its own re-election. Since voters know this, the government’s apparent inconsistency in preferences over time will adversely affect its credibility in making promises of redistributive compensation. One consequence of considering the potential impact of the economic changes wrought by reform (Jain et al. 2014) is that we are able to offer some insight into the often puzzling dynamics of public opinion over the course of the adoption of economic reform. Why do economic reforms that are proceeding successfully often run aground? We suggest that if initially successful reforms change the balance of political power in such a way as to make future redistribution less likely, then public opinion may turn against reform. Thus, in some sense, an initially successful reform may well end up sowing the seeds of its own destruction.

However, credibility (or its absence) is not the only stumbling block in the path of economic reform. If voters are not fully informed *ex post* about the effects of the reform, then they will (correctly) view with suspicion any redistributive promises made by the government. Voters recognize that the government, in identifying the individual winners and losers, has an incentive to use this redistributive mechanism to reward its supporters. In Jain and Majumdar (2016), we argue that one consequence of this (well-founded) voter suspicion might be that redistributive promises by the government may be insufficient to guarantee the political passage of output-expanding economic reforms.

We extend the analysis described above by examining the (often perverse) incentives created by redistributive compensation. This tension, between the safety-net aspect of social protection programmes on the one hand and the disincentive effects of compensation programmes on the other (for example, on retraining efforts that workers can undertake in order to mitigate the effects of the reform), is well understood in the literature. The contribution of this research is to consider its political implications for the adoption of economic reform policies, and the extent to which these redistributive mechanisms are politically and economically feasible.

3 A model of reform with retraining and compensation

In this section, we develop a model to foster some intuition about the political economy of social protection programmes, and more specifically the effect that they might have on the government’s ability to implement large-scale reform. These effects can operate in very complex ways, so for clarity of exposition, the model we construct is a deliberately stylized one, in order to focus on the specific mechanism that we describe.

3.1 Model structure

Consider an economy comprised of two production sectors, M and X, each of which produces output—goods M and X—using only one privately provided factor of production: labour.² The economy is populated by citizen-workers, so that the population of voters is the same as the labour

² Since the focus of our model is specifically on social protection programmes that cushion the impact of shocks to labour in particular, this allows us to concentrate on the impact on labour in the starkest way.

force, and indeed we shall use these terms interchangeably to refer to them. Each worker supplies one unit of labour per period. This simplification allows us to abstract away from modelling the labour supply decision as wages change. In a more complex model, the effect of the reform on wages would of course have an effect on labour supply decisions. However, the essential insights of the analysis would be unaffected even with the incorporation of this additional complexity, so to keep matters as simple as possible, we assume that labour is supplied inelastically. Each worker/voter maximizes their (expected) income, net of taxes and transfers, which we describe in more detail below.

Suppose further that, *ceteris paribus*, the X sector is more productive than the M sector. (For simplicity, we normalize the prices of the good produced in each sector to 1. Further, assume that both goods are tradeable, so that their prices are set internationally, and do not change through our analysis.) However, as a result of existing disparities in government spending (e.g. on sector-specific infrastructure for the two sectors), the pre-reform wages in both sectors are equal.³

Thus the reform being contemplated can be thought of as a reorientation of government infrastructural spending away from the less productive M sector towards the more productive X sector. (With minimal modification, the reform can instead be thought of as a change in trade policy, which changes the relative prices of the X and M goods, and *mutatis mutandis* the wage rates.) This reform will cause a change in the size of the two sectors, as some labour is reallocated from the shrinking M sector to the expanding X sector, and an opening of a wage gap between the two sectors. Workers who are already employed in the expanding sector see an increase in their wage by amount s , while those who remain in the M sector will see a reduction in their wage by f . These respective sets of workers can naturally be interpreted as ‘winners’ and ‘losers’ from the reform.

In addition, as mentioned above, the opening up of the intersectoral wage differential results in intersectoral labour reallocation, as some workers move from the reduced wages of the M sector to the higher wages of the X sector. Again, it is natural to think of these workers as gaining from the reform. However, the key difference between these winners and the workers who are already in the X sector before the reform is that the identity of these transplanted workers is not known *ex ante*. Fernandez and Rodrik (1991) term this ‘individual-specific uncertainty’: while it is common knowledge before the reform that some M sector workers will benefit from the reform and emerge as winners, the identity of at least some of those workers is not known in advance, even to themselves. We describe this key element of the model next.

Individual-specific uncertainty

As described above, at least some workers do not know in advance whether they are going to be winners or losers.⁴ Let $(1 - \gamma)$ denote the proportion of workers in the economy who will win for

³ For a more detailed description of the model set-up, see Jain and Mukand (2003) or Jain and Majumdar (2017), which employ a similarly stripped-down framework to analyse the political economy of reform. However, neither of those papers considers social protection or retraining programmes, instead focusing on the credibility of government promises.

⁴ There may be a number of reasons for this individual-specific uncertainty—for example, perhaps as a result of different individual aptitudes for the new jobs being created in the expanding sector, the relocation costs or associated disutility might vary across individuals, and might be unknown beforehand. See Fernandez and Rodrik (1991) for a discussion, and Jain and Mukand (2003) for a formalization of this idea.

sure, and let this be common knowledge.⁵ The remaining proportion γ face individual-specific uncertainty: for simplicity, we assume that each of these γ workers has an equal probability of being a winner, i.e. of relocating to the X sector and earning a higher wage.⁶ Thus, for each worker who faces individual-specific uncertainty, we assume that, with probability μ , she emerges as a winner, in which case her wage rises by s , and with probability $(1-\mu)$, she emerges as a loser, in which case her wage falls by f .

Social protection programmes

The key point here is that the reform can be accompanied by a retraining programme, which can be accessed by workers employed in the shrinking sector. This (costly) retraining will affect the likelihood of the worker emerging as a winner: in other words, the probability of emerging as a winner, μ , depends on the worker's retraining effort.

If the worker undertakes retraining, then the probability of 'success', i.e. of emerging a winner, is p . (With probability $(1-p)$, the retrained worker still loses f .) If the worker does not retrain, then the corresponding probability of 'success' is q , where $q < p$. Note that the retraining does not guarantee that the worker will be able to relocate, but does increase the probability that she will emerge as a winner.

However, this retraining comes at a cost to the worker, denoted by c . For the sake of generality, this cost c can be interpreted either as a monetary cost or as the (equivalent money-metric) disutility of the effort required to undertake the training.

Redistributive compensation

We now turn to the political factors influencing the decision-making of these citizen-workers. While it is easy to see that the prospective losers from an economic policy change might vote against that change, the opposition of these voters might be overcome by appropriate redistribution to compensate the losers from (part of) the gains of the winners. Indeed, for a potentially Pareto-improving reform to actually result in a Pareto improvement *ex post*, some redistribution will be necessary.

We allow for redistributive compensation by allowing for the possibility that voters (or the government) can choose a tax/transfer vector to compensate the losers with (part of) the winnings of the winners. (We discuss the politics and timing of this below.) We impose the usual restrictions on this tax/transfer vector: it must be budget-balancing, and it must be non-regressive in the gains/losses from the reform. A natural extension of the model would be to allow the government's ability to implement this tax/transfer vector to be a function of its 'state capacity', which might limit the extent of these tax/transfers. (For a discussion, see Besley and Persson (2009, 2011), who highlight the wide cross-country differences in the institutional capacity of the state to, among other things, collect taxes and implement redistribution.)

⁵ Again, as described above, this can be thought of as the pre-reform proportion of workers employed in the sector that is expected to expand as a result of the reform.

⁶ It would be straightforward to extend this to the case where each worker has a different probability of emerging as a winner, perhaps as a result of previous investments in training etc., but the additional insights would probably not repay the cost of the resulting increase in notational complexity.

Politics and timing

One pleasing implication of the simplicity of the model is that we can construct it as a single-period model. Further, we can assume that all decisions are made by simple majority voting. It would be easy to extend the model to a multiperiod model, with elections each period, in which candidates motivated by re-electoral concerns choose platforms for voters to vote on, but the basic insights can be conveyed much more simply.

Timing: In this simple one-period model, at the start of the period the workers/voters must decide two issues: (1) whether to enact the reform, and (2) whether to redistribute after the reform.⁷ If the reform is launched, then the new wages are realized, and intersectoral labour reallocation reveals the winners and losers. Further, if voters have chosen to redistribute, then the post-reform tax-and-transfer programme is implemented.⁸ If instead the voters choose not to enact the reform, then wages stay as they were, i.e. the status quo is maintained.

Political balance: For the model to be interesting, it should be the case that neither the proportion of ‘sure winners’ nor that of ‘sure losers’ should be large enough that the group can carry the vote by itself. Otherwise, in the vote on whether to enact the reform and whether to redistribute, the outcomes would be trivially determined by the already-known majority. If the ‘sure winners’ (the workers in sector X) were in a majority, then they would vote to enact the reform and not to redistribute *ex post*. At the other extreme, if the ‘sure losers’ are in the majority (i.e. a large enough proportion of M sector workers have no chance of emerging as winners), then either they will vote not to implement the reform, or (if the maximal feasible redistribution is enough to compensate them) they will vote to enact the reform and maximally redistribute.

To explore the more interesting case, where the adoption of the reform and the redistribution are not predetermined, and to see how it interacts with the retraining decision, we thus assume that the polity is balanced in the sense that no particular set of voters is enough to carry the vote by itself. More specifically, we assume that the γ workers who face individual-specific uncertainty are numerous enough to be pivotal, i.e. that their vote will be decisive in whether the reform is adopted.

Output-expanding, majority-benefiting reform

Finally, to focus attention on the most interesting case, we make the following assumptions.

The first assumption is intuitive: we assume that the reform expands national income, i.e. is potentially Pareto-improving:

$$[(1 - \gamma) + \gamma\mu].s - \gamma(1 - \mu).f \geq 0 \quad \text{‘Output-expanding’}$$

⁷ Although the decision on redistribution also naturally involves the decision on how much to redistribute, in what follows it will be straightforward to see that, if redistribution is adopted, then there will be maximal redistribution, subject to the non-regressivity and budget-balancing conditions described earlier.

⁸ Thus, implicitly we are assuming that the voters’ *ex ante* decision on whether to redistribute *ex post* is a credible commitment. Instead, this decision can be embedded in a more fleshed-out model, with an incumbent government driven by reputational concerns about its commitments. However, since the credibility of commitments is not the main focus of the model here, we elide these concerns and simply assume that the *ex ante* decision is implemented *ex post*. For a discussion, see Jain et al. (2014).

The condition above can be interpreted straightforwardly: the first term represents the combined gains of the ‘known winners’ $(1 - \gamma)$ (representing those workers already employed in the expanding sector) and the proportion μ of the γ individually uncertain workers who emerge as winners. Each of these winners gains s . The second term represents the losses accrued by the remainder of the workers: the proportion $(1 - \mu)$ of the γ individually uncertain workers, each of whom loses f . The condition simply asserts that the gains of the winners exceed the losses of the losers, so that, at least potentially, the reform being contemplated could result in a Pareto improvement.

Second, to sharpen the apparent paradox (following Fernandez and Rodrik 1991), we confine attention to those reforms that are also majority-benefiting, i.e. it is common knowledge *ex ante* that the reform is expected to result in a majority of the population emerging as winners.

$$(1 - \gamma) + \gamma\mu \geq \frac{1}{2} \qquad \text{‘Majority-benefiting’}$$

Again, each term in the expression above is easily interpretable: the first term is the proportion of ‘sure winners’, and the second is the proportion μ of the individually uncertain workers, γ , who emerge as winners. The sum of the two constitutes a majority, and hence one might expect the reform to pass in a majority vote.

We turn next to solving the model, and examining the role that retraining and compensatory redistribution might play in the reform adoption decision.

3.2 Solving the model

In order to examine the intersection of economic considerations with political economy issues, we contrast two cases, which we label ‘reform with compensatory redistribution’ and ‘reform with no compensatory redistribution’. We focus on the workers facing individual-specific uncertainty. It is straightforward to predict the voting decisions of the winners and losers who are known in advance.⁹ Indeed, that was the primary motivation for our assumption that the workers facing uncertainty are pivotal. Were they not, then either the known winners or the known losers would carry the vote, with or without redistribution.

Reform with compensatory redistribution

Suppose that *ex post* redistributive compensation is assured. As discussed earlier, this might be because the existing structure of social protection assures some degree of redistributive compensation, and this is supported by the reputational concerns of the incumbent government. This is a necessarily stylized assumption, but it helps to draw the sharpest contrast with the next case we consider, where there is no *ex post* compensation.

⁹ Our assumption that the tax-and-transfer from winners to losers has to be non-regressive guarantees that, *ex post*, the winners will end up better off than the losers. If the redistribution is large enough that even the losers end up better off post-redistribution, then again it is easy to predict the result of the vote.

Let v and r respectively denote the (maximum feasible) tax and transfer chosen.¹⁰ Winners pay v into the compensation fund, and losers receive r .¹¹ Also, recall that each worker can choose to undertake a costly retraining programme in order to improve the odds of emerging as a winner. We have previously defined c as the cost that the worker privately bears for this retraining programme.

Now we can define the following two conditions, which determine whether retraining is the individually rational decision for a worker in the shrinking sector who is uncertain about the impact of the reform on her, and whether those workers are likely to support reform even with the promise of compensatory redistribution.

$$(p - q).(s + f) - (p - q).(r + v) < c \quad [\text{W1}]$$

$$q.(s - v) + (1 - q).(-f + r) < 0 \quad [\text{W2}]$$

Condition [W1] says that not retraining is preferable to retraining. The right-hand side of the inequality is simply the retraining cost, while the left-hand side represents the potential benefit of retraining. The two terms represent the expected gain from the higher probability of being ‘successful’ with retraining, net of the additional tax (versus transfer) paid in that case. Thus, if the condition holds, workers facing individual-specific uncertainty will choose not to undertake the retraining.

Condition [W2] says that even with no retraining, and even with compensatory redistribution, the expected value of the reform is negative for each of the workers who face uncertainty. Thus, in expected terms, these workers would be expected to vote against the reform. Hence the condition can also be interpreted as a ‘reform passage’ condition: if it holds, then the reform will not win enough support to pass.

This leads immediately to our first observation.

Observation 1: With compensatory redistribution, if conditions [W1] and [W2] hold, then an output-expanding, majority-benefiting reform will fail to win passage.

It is worth pointing out the implications of this result: not only is the reform under consideration expected to expand total output, it is also expected to benefit a majority. Further, workers can choose to retrain, to improve their chances of emerging as winners. In the event that they still lose, then at least some compensation is guaranteed, to redistribute some of the gains of the winners to buffer the losses of those whose wages decline. Yet the two conditions guarantee that workers choose not to retrain, and that the promised compensation is insufficient to persuade them to support the reform.

¹⁰ For simplicity, we assume that if redistribution occurs, then it treats all payers and receivers equally, i.e. in particular that all receivers receive the same compensation. Asheim et al. (2006) show that, in a class of situations such as that in this model, the winners would have to compensate all losers, rather than trying to ‘buy off’ just enough losers to create a majority.

¹¹ The budget-balance condition simply requires that, subject to the non-regressivity requirement, the maximal amount v collectable in taxes from the winners must be no less than the amount r redistributed to the losers. It is straightforward to check that this condition does not bind in the proposition below.

Reform with no compensatory redistribution

Suppose instead that there is to be no *ex post* redistribution. In that case, we can define two conditions analogous to those above. As before, the first condition determines whether retraining is the individually rational decision for a worker in the shrinking sector who faces individual-specific uncertainty, and the second whether these workers are likely to support reform in the absence of compensatory redistribution.

$$(p - q).(s + f) > c \quad [\text{N1}]$$

$$p.(s - c) + (1 - p).(-f - c) > 0 \quad [\text{N2}]$$

Condition [N1] says that retraining is preferable to not retraining. The left-hand side represents the expected increase in income, while the right-hand side is simply the cost incurred in retraining.

Condition [N2] says that, with retraining, the expected value of reform is positive for each of the (pivotal) workers who face uncertainty, even when there is no compensatory redistribution on offer. Hence the condition can also be interpreted as a ‘reform passage’ condition: if it holds, then the reform will win enough support to pass.

Putting the two conditions together leads to our second observation.

Observation 2: With no compensatory redistribution, if conditions [N1] and [N2] hold, then an output-expanding, majority-benefiting reform will win passage.

Again, it is worth emphasizing the implications of this result: even in the absence of compensatory redistribution, individually uncertain workers/voters are willing to support the reform. Their willingness to support the reform comes from the fact that, with retraining, the probability of emerging as winners, p , becomes high enough not only to cover the retraining costs, but also to make the expected gains positive.

Political failure’: political economy of social protection

We can now combine the insights from the two sets of conditions above to get perhaps the most counter-intuitive result: that a reform might pass in the absence of redistribution, where it would have failed to pass with redistribution.

Observation 3: There exist parameters $\{s, f, p, q, c\}$ such that even with maximal feasible compensatory redistribution (v, r) , conditions [W1] and [W2], as well as [N1] and [N2], hold simultaneously.

It is straightforward to check that all four conditions can indeed hold simultaneously. If r is small relative to v , and q is small relative to p , then [W2] and [N2] will be satisfied. If $(r+v)$ is large enough, then [W1] and [N1] will be satisfied.¹²

Taken together, the conditions above, if satisfied, illustrate a paradoxical situation in which the expected payoff from reform is negative with redistribution (hence reform fails to win support)

¹² For example, parameter values of $p = \frac{1}{2}$, $q = \frac{1}{4}$, $s=500$, $f=200$, $v=200$, $r=75$, and $c < 150$ will assure this.

and positive without redistribution (hence reform passes). Indeed, to sharpen the paradox, it is precisely the *absence* of compensatory redistribution that assures passage (in condition [N2])—with compensatory redistribution, condition [W2] would apply. The assurance of redistributive compensation blunts the incentive to incur the retraining costs (for a parallel, see the discussion of the ‘deterrent effects’ of workfare programmes in Besley and Coate (1991)) precisely because the tax-and-transfer requirements of the redistributive regime make it privately rational for individual workers not to incur the private costs of retraining. This is reflected in the politics of the vote: workers vote down a reform that is to be accompanied by redistribution, where they would have supported that same reform in the absence of redistribution.

While we postpone a discussion of policy considerations, we conclude our discussion of the simple formal model by noting that the political economy of social protection programmes can be quite complex, and that the political and economic incentives created by these programmes can interact in quite unexpected and non-obvious ways. In particular, the idea that *ex post* redistribution to compensate losers from a reform should increase political support for reform, and increase the likelihood of its passage, seems very plausible and intuitive. Our results suggest that this presumption may not always hold, and that a degree of caution might be in order in considering the ability of social protection to enable the political passage of economically beneficial reforms.

4 Discussion and extensions

The simple model presented here can be extended along a number of dimensions. One such extension, which would incorporate the political economy considerations described above, would be to the ‘workfare versus welfare’ model of Besley and Coate (1991), applying it to the analysis of social protection policies. On the one hand, worker retraining can be targeted much more closely to the most ‘deserving’ workers, retraining (analogous to workfare), or those who might best benefit from it. On the other hand, transfer programmes might be cheaper overall, if the screening benefits of retraining programmes come at a very high cost, or if their benefits are perceived as being low. Crucially, the funding for these programmes comes from the gains of the winners, which creates political pressures on the government, the formal modelling of which has previously been ignored in the literature. In particular, we speculate that retraining programmes might be the only ones that are politically feasible, for these political economy reasons, even when transfer programmes might be economically efficient.

Recent research has considered alternative ways by which governments can offer social protection to displaced workers. For example, in the case of workers adversely affected by trade liberalization, governments can (and do) use wage subsidies, unemployment insurance, or retraining subsidies (see e.g. Brander and Spencer 1994; Davidson and Matusz 2002). However, these papers focus on the economic efficiency of the various compensation mechanisms, ignoring their political aspects. Our interest is in examining how the political exigencies of the compensation process shape the incentives of affected workers, and thereby affect the political feasibility both of the various compensation mechanisms and of the reform whose passage is being sought by these compensatory mechanisms. In a sense, this can be viewed as part of a broader research agenda that takes a political economy approach to policy questions surrounding economic reform.

5 Conclusion

We have developed a simple model to foster some intuition about how economic and political factors might play a role in the interaction between retraining and compensation programmes on the one hand and political support for (potentially Pareto-improving) economic reforms on the other. In particular, the model suggests that the optimism that political opposition to reforms that create winners and losers can be overcome by a judiciously chosen social protection package might not be justified.

Although it has long been recognized that redistribution might blunt the incentives of affected workers to undertake the costly adjustments that they need to make (Artuc et al. 2010), we have constructed a model which applies this insight to the consideration of political support for economic reform. In particular, the model suggests a ‘political redistributive burden’ of sorts: if redistribution is financed by taxing winners, then that narrows the gap between winners and losers, and may reduce the willingness to undertake costly complementary actions such as retraining. We have shown that, as a consequence, there can be a political failure: output-expanding, majority-benefiting policies may not win passage, even with the assurance of social protection policies.

More broadly, this research suggests that recognition of political exigencies should play an important role in the consideration of worker retraining programmes versus transfer programmes, in any context where the effects of labour market upheaval and worker displacement necessitate the implementation of accompanying social protection policies.

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