

Online Appendix to the Paper:
Improving “National Brands”:
Reputation for Quality and Export Promotion Strategies

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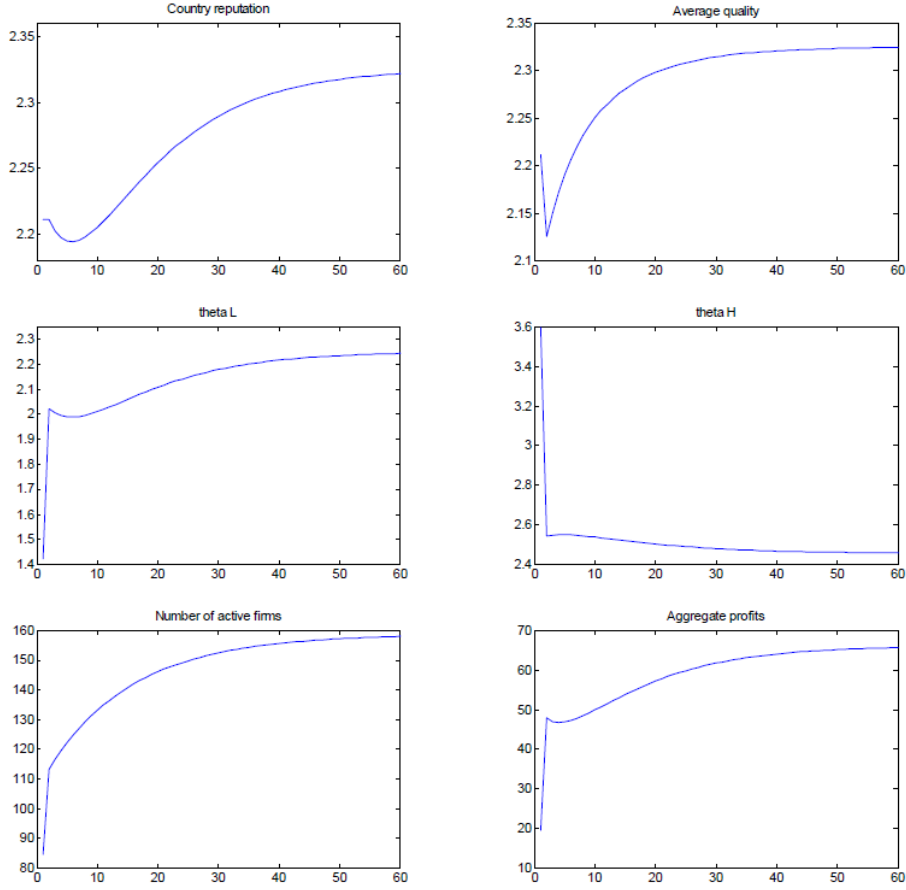
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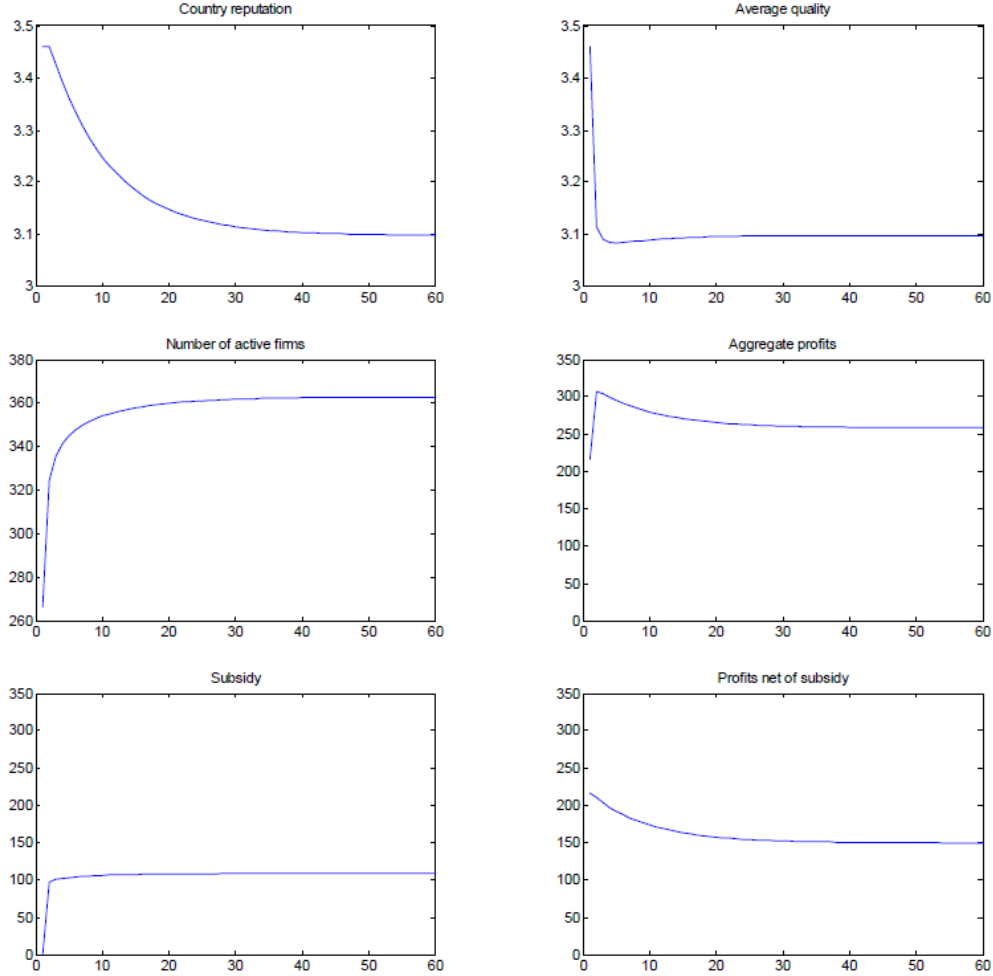
A Additional Figures



Notes: Parameter values: $\theta_m = 1$, $\alpha = 3$, $\delta = 0.9$, $\eta = 0.1$, $E = 100$, $k = 1.5$, $k_{subs} = 1.2$. $\theta^* = 3$. The initial unique steady-state of this economy is a LQE with $\mu = \bar{\theta} \approx 2.211$.

The figure provides a numerical example of the economy's transition to its new, higher steady state in a case where the LQE is unique. It shows the transition dynamics for average quality, reputation, the thresholds θ_L and θ_H , as well as the number of active firms and aggregate profits following an unanticipated permanent decline in k and assuming that all firms correctly anticipate the future path of μ . In the first period in which the subsidy is introduced, reputation is unchanged but the lower cost makes entry profitable for a larger range of firms. The gap (θ_L, θ_H) immediately narrows. The immediate net effect is a decline in average quality as the entry of low-quality firms dominates on impact for an unanticipated subsidy. However, over time as new cohorts of high-quality firms enter and decide to stay active, average quality $\bar{\theta}$ and reputation μ start rising, while θ_L further increases and θ_H keeps falling. μ adjusts to $\bar{\theta}$ with a lag, further encouraging entry and pushing up $\bar{\theta}$. This continues until reputation has caught up with actual quality and the economy has reached its new steady state.

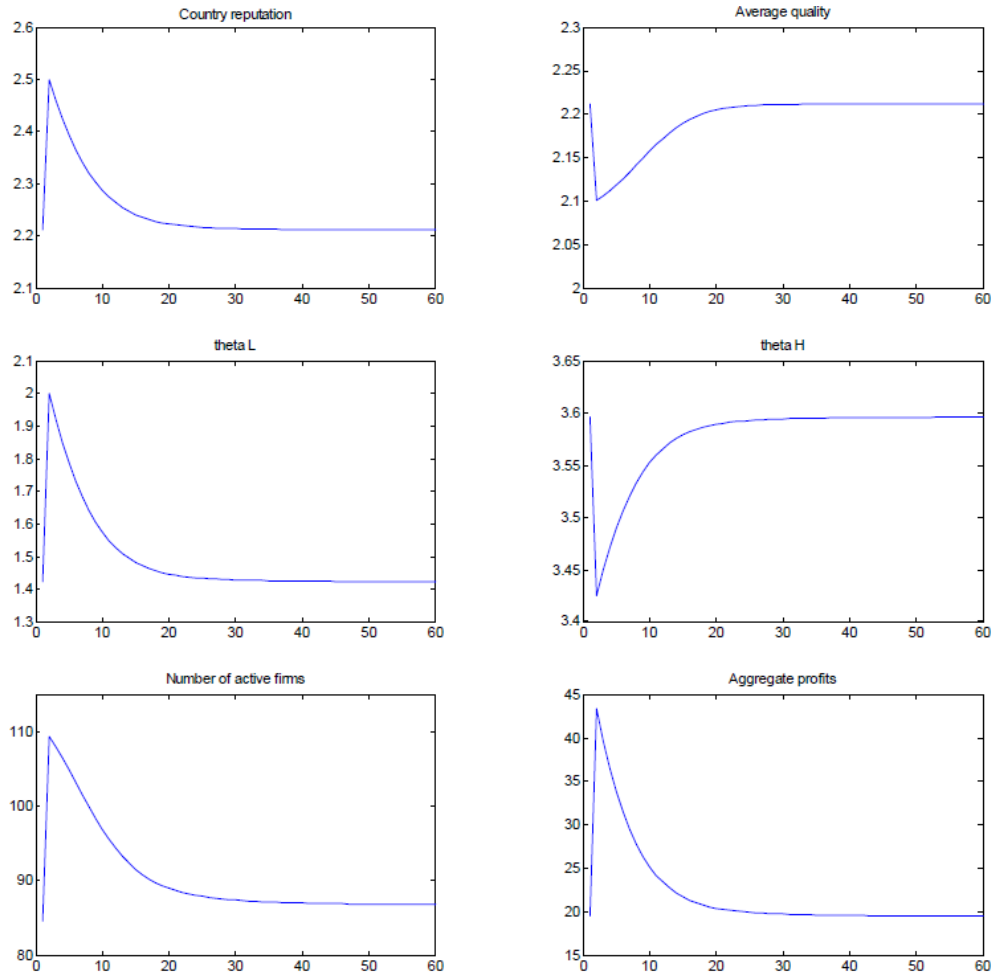
Figure A.1: Export Subsidy in a LQE



Notes: Parameter values: $\theta_m = 1$, $\alpha = 2$, $\delta = 0.9$, $\eta = 0.1$, $k = 1.5$, $k_{subs} = 1.2$, $\theta^* = 3$. The initial unique steady state of this economy is a HQE with $\mu = \bar{\theta} \approx 3.461$.

The figure illustrates the transition to the new steady state in a HQE when an export subsidy is introduced. When the subsidy is introduced, low-quality firms immediately stay longer, leading to an increase in the number of active firms and a steep decline in average quality. National reputation then starts adjusting downwards until it reaches its new steady-state level. Aggregate profits first rise above their long-term value, because reputation remains “too high” during the adjustment period. Over time, as μ falls and new cohorts of firms respond to the lower cost, the economy converges to a steady state with lower reputation and quality. As subsidies reduce firms’ costs, aggregate profits are higher than in the initial equilibrium, but the increase in profits does not match the cost of the subsidy.

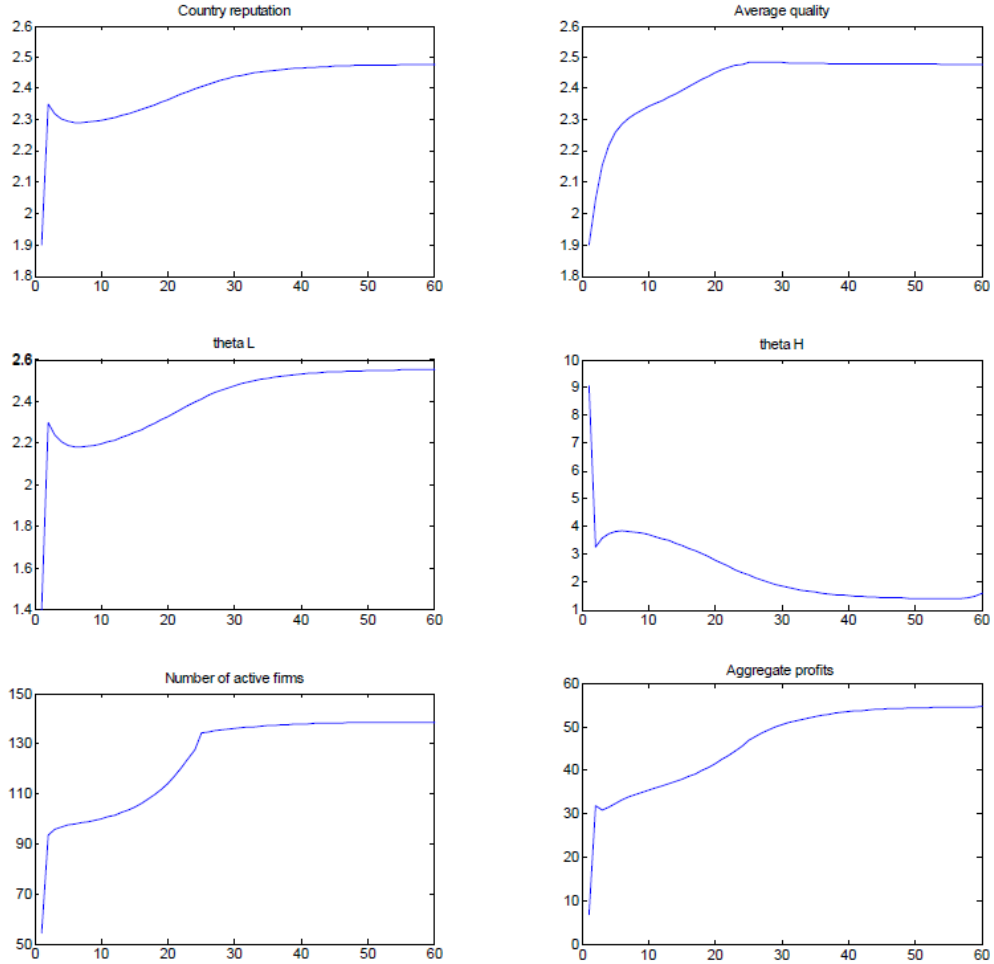
Figure A.2: Export Subsidy in a HQE



Notes: Parameter values identical to Figure A.1. μ_t rises exogenously to 2.5 at $t = 1$.

The figure provides an example of the transition dynamics associated with a positive shock if the economy has only one long-run equilibrium.

Figure A.3: Positive Reputation Shock with a Unique LQE



Notes: Parameter values identical to Figure 2a. μ_t rises exogenously to 2.35 at $t = 1$.

The figure illustrates the transition to the new steady state after a large positive reputation shock when there are multiple equilibria. With the parameter values of Figure 2a, the economy starts in the LQE μ_S and the unanticipated one-shot policy at time 1 results in a jump of the country reputation above μ_U . Following the large shock, the economy moves to the HQE μ'_S . Note that the policy is not anticipated prior to time 1, but once the shock is realized, we assume that all firms have correct expectations of the subsequent path of μ . The immediate effect of the shock is to boost expected profits for all firms, fostering entry by a range of firms that did not export in the initial steady state. For a large shock as defined in Proposition 5, the net effect of additional entry around θ_L and θ_H is to raise average quality, sufficiently so to ensure that reputation in the next period remains above μ_U . As the policy was not anticipated by high-quality firms in the previous periods, μ falls in the immediate aftermath of the shock. Reputation rises thereafter as new cohorts of high-quality firms decide to enter and stay active, until the economy settles in the new steady state μ'_S with higher quality and higher aggregate profits.

Figure A.4: Large Positive Reputation Shock with Multiple Equilibria