

Addendum for the paper “*Technical change and profitability in general economies with fixed capital and differential profit and wage rates*”. Not for publication.

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Abstract

Section 1 shows the results of robustness checks discussed in the main paper. Sections 2-7 show results for alternative selections of the reference sector.

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1 Robustness Checks

This section presents results from the robustness checks described in section 5 of the main paper. Figures 1-3 show the ω_m - r_m curves for technical changes in sectors $j = 2, \dots, 7$ at values of φ from 1.05 to 2. Tables 1 and 2 show the effects of technical changes in the same sectors at different values of φ on aggregate profitability. Tables 3-6 show post-technical change prices p^{*w} for technical changes in sectors $j = 2, \dots, 7$ at different values of φ , and Tables 7-10 show post-technical change labour values v^* for the same technical changes at the reported values of φ . In the diagrams shown here, and in Sections 2-7, the wage-profit curves are truncated and the numerical range shown is restricted to highlight the effects of technical changes.

Figure 1: Wage-profit (ω_m - r_m) curves for incremental changes in φ

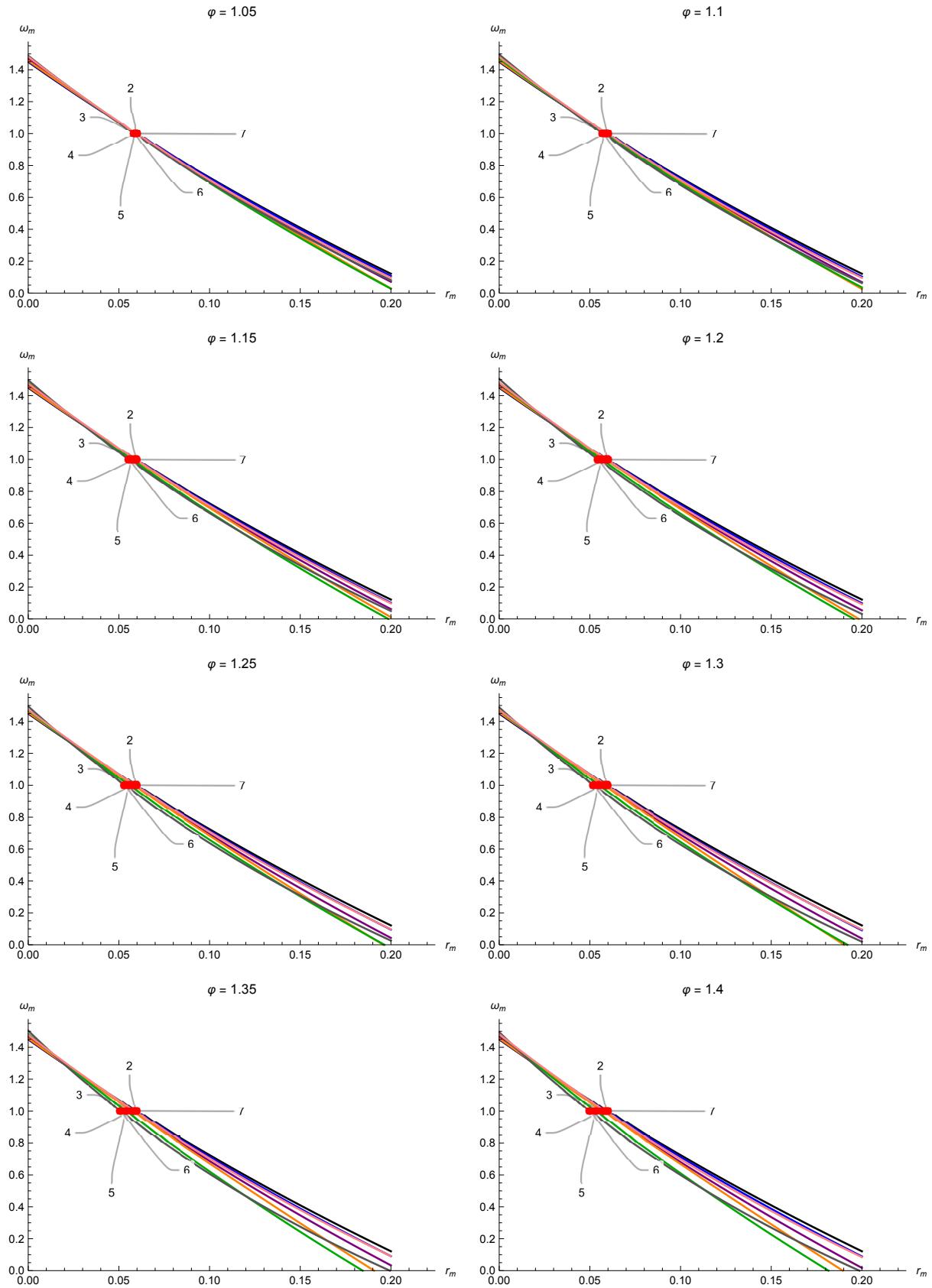


Figure 2: Wage-profit (ω_m - r_m) curves for incremental changes in φ , contd.

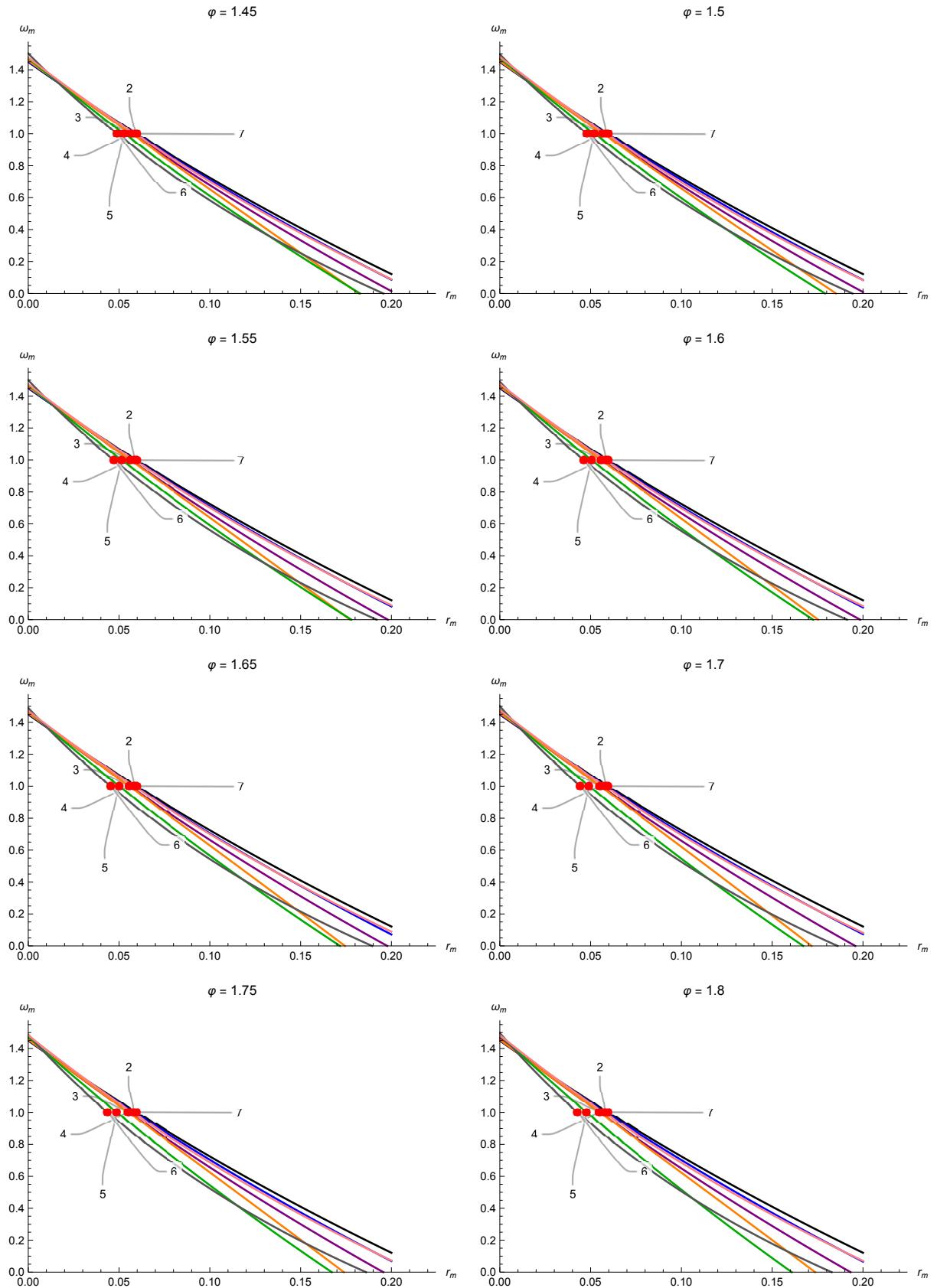


Figure 3: Wage-profit (ω_m - r_m) curves for incremental changes in φ , contd.

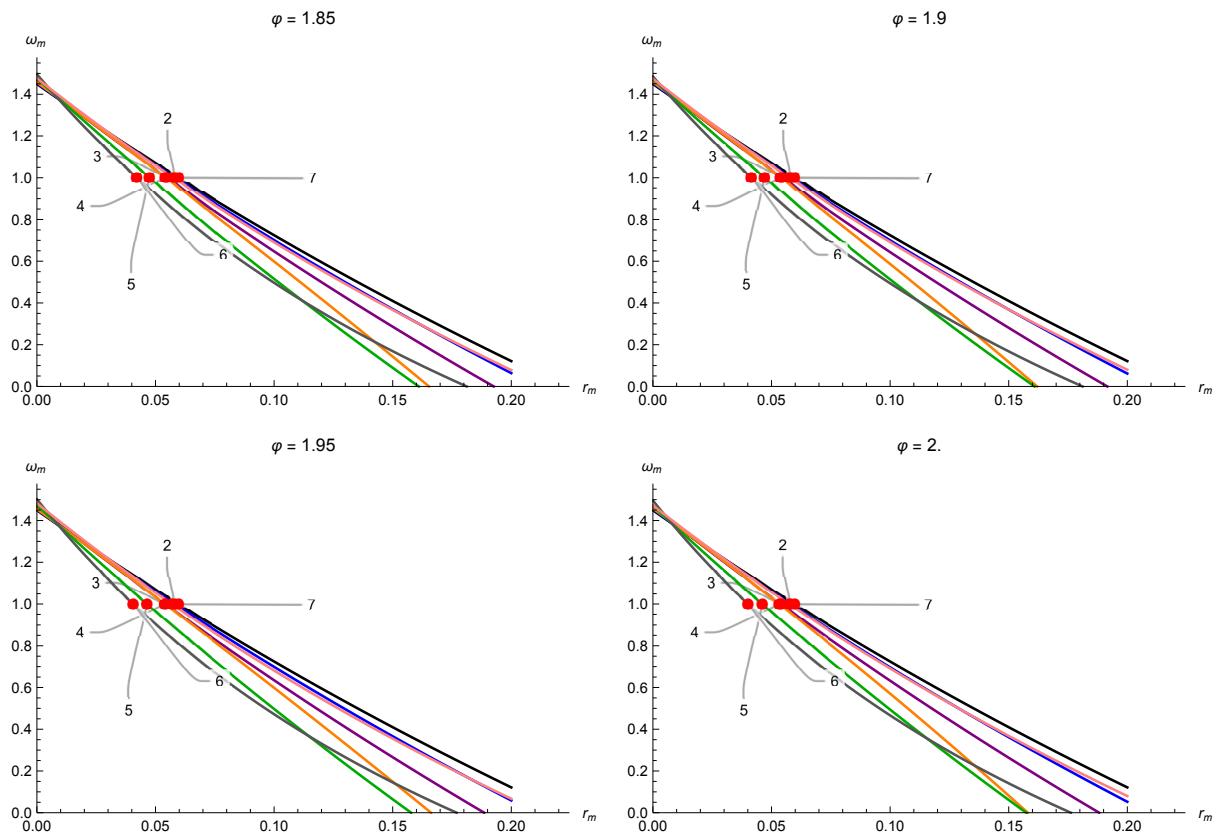


Table 1: Profitability after technical changes for incremental changes in φ

	(2) Mfg.	(3) Oth.Mfg.	(4) Cstrt.	(5) Bus.Svcs.	(6) Cns.Svcs.	(7) Soc.Svcs.
$\varphi = 1.05:$						
r_m	0.05961	0.05937	0.05935	0.05879	0.05829	0.05954
r	0.1116	0.1116	0.1163	0.1145	0.1126	0.1338
\bar{r}	0.1486	0.1486	0.162	0.1497	0.1467	0.1677
$\varphi = 1.1:$						
r_m	0.05951	0.05906	0.05904	0.05799	0.05692	0.0594
r	0.1118	0.1111	0.1157	0.1122	0.1124	0.1337
\bar{r}	0.149	0.1478	0.1607	0.1469	0.1449	0.1675
$\varphi = 1.15:$						
r_m	0.05942	0.05876	0.05871	0.05708	0.05562	0.0593
r	0.1118	0.1107	0.1162	0.1133	0.111	0.1316
\bar{r}	0.149	0.1474	0.1655	0.1472	0.1421	0.1656
$\varphi = 1.2:$						
r_m	0.05933	0.05844	0.05837	0.05627	0.05434	0.05909
r	0.1118	0.1104	0.1168	0.1127	0.1113	0.1369
\bar{r}	0.1492	0.147	0.1676	0.1461	0.141	0.1701
$\varphi = 1.25:$						
r_m	0.05924	0.05812	0.05805	0.05562	0.05321	0.05907
r	0.1121	0.1102	0.1171	0.1112	0.1098	0.1312
\bar{r}	0.1496	0.1468	0.1701	0.1442	0.1385	0.165
$\varphi = 1.3:$						
r_m	0.05914	0.05784	0.05765	0.05482	0.05211	0.05895
r	0.1124	0.1097	0.1187	0.1112	0.1087	0.1322
\bar{r}	0.1501	0.1461	0.1778	0.1437	0.1365	0.1658
$\varphi = 1.35:$						
r_m	0.05906	0.05756	0.05742	0.05388	0.05093	0.05873
r	0.1122	0.1094	0.118	0.1121	0.1093	0.1367
\bar{r}	0.1499	0.1458	0.1763	0.1438	0.1355	0.1694
$\varphi = 1.4:$						
r_m	0.05899	0.05716	0.05715	0.05314	0.04995	0.05846
r	0.1121	0.1094	0.1179	0.1118	0.1076	0.1424
\bar{r}	0.1498	0.1457	0.178	0.1429	0.1331	0.1742
$\varphi = 1.45:$						
r_m	0.0589	0.05694	0.05664	0.05265	0.04889	0.05848
r	0.1121	0.109	0.1202	0.1103	0.1079	0.1383
\bar{r}	0.15	0.1451	0.188	0.1411	0.1321	0.1706
$\varphi = 1.5:$						
r_m	0.05882	0.05668	0.05656	0.05192	0.04797	0.05821
r	0.1123	0.1087	0.1185	0.1103	0.1067	0.1434
\bar{r}	0.1502	0.1447	0.1815	0.1406	0.1302	0.175

Table 2: Profitability after technical changes for incremental changes in φ , contd.

	(2) Mfg.	(3) Oth.Mfg.	(4) Cstrt.	(5) Bus.Svcs.	(6) Cns.Svcs.	(7) Soc.Svcs.
$\varphi = 1.55:$						
r_m	0.05873	0.05623	0.05601	0.05136	0.04703	0.05834
r	0.1123	0.1086	0.1209	0.1097	0.1061	0.1366
\bar{r}	0.1503	0.1446	0.1928	0.1398	0.1285	0.169
$\varphi = 1.6:$						
r_m	0.0586	0.05605	0.0557	0.05053	0.04623	0.0581
r	0.1125	0.1083	0.1213	0.1101	0.105	0.1408
\bar{r}	0.1508	0.1442	0.1957	0.1394	0.1268	0.1726
$\varphi = 1.65:$						
r_m	0.05849	0.05582	0.05545	0.05001	0.04535	0.05816
r	0.1126	0.1078	0.1212	0.1094	0.1045	0.137
\bar{r}	0.151	0.1436	0.1954	0.1384	0.1255	0.1691
$\varphi = 1.7:$						
r_m	0.05847	0.05553	0.05512	0.04922	0.04446	0.05782
r	0.1125	0.1077	0.1218	0.11	0.1046	0.1432
\bar{r}	0.1509	0.1435	0.1998	0.1382	0.1242	0.1744
$\varphi = 1.75:$						
r_m	0.05836	0.05528	0.05508	0.04881	0.04378	0.05738
r	0.1127	0.1074	0.1205	0.1089	0.1034	0.1506
\bar{r}	0.1513	0.1431	0.1947	0.1369	0.123	0.1799
$\varphi = 1.8:$						
r_m	0.05826	0.05493	0.0549	0.04788	0.04291	0.05721
r	0.1127	0.1073	0.1203	0.11	0.1034	0.1527
\bar{r}	0.1514	0.1429	0.1959	0.1372	0.1217	0.182
$\varphi = 1.85:$						
r_m	0.05818	0.05475	0.0542	0.04751	0.04219	0.05744
r	0.1127	0.1068	0.123	0.1089	0.1029	0.146
\bar{r}	0.1514	0.1422	0.2075	0.136	0.1205	0.1764
$\varphi = 1.9:$						
r_m	0.05811	0.05447	0.05383	0.04714	0.0416	0.05745
r	0.1128	0.1067	0.1238	0.1082	0.1018	0.144
\bar{r}	0.1517	0.1421	0.2128	0.1351	0.1191	0.1747
$\varphi = 1.95:$						
r_m	0.05802	0.05404	0.05394	0.04649	0.0407	0.0568
r	0.1128	0.1065	0.122	0.1083	0.1025	0.1552
\bar{r}	0.1517	0.1418	0.2057	0.1347	0.1183	0.1837
$\varphi = 2.:$						
r_m	0.05786	0.05385	0.05321	0.04612	0.04012	0.05732
r	0.1132	0.1061	0.1247	0.1075	0.1016	0.1441
\bar{r}	0.1525	0.1413	0.2183	0.1336	0.117	0.1748

Table 3: Prices p^{*w} after technical changes for incremental changes in φ

	(1) Agrc.	(2) Mfg.	(3) Oth.Mfg.	(4) Cstrt.	(5) Bus.Svcs.	(6) Cns.Svcs.	(7) Soc.Svcs.
$\varphi = 1.05:$							
2	55.358	36.66	40.9027	48.4895	45.1788	48.9748	74.0576
3	55.3468	36.5805	41.0341	48.4957	45.1387	48.93	74.0512
4	55.3596	36.561	40.9039	48.8516	45.1779	48.9822	74.0674
5	55.3655	36.6141	40.9562	48.4632	45.666	48.8824	74.0661
6	55.0608	36.3945	40.7107	48.2494	44.8493	49.1724	73.9203
7	55.3376	36.5432	40.8847	48.4668	45.1525	48.9433	74.5347
$\varphi = 1.1:$							
2	55.3631	36.769	40.9071	48.4838	45.1671	48.9614	74.057
3	55.341	36.6011	41.1564	48.4964	45.0927	48.8781	74.0448
4	55.3654	36.5642	40.9087	49.1773	45.167	48.9775	74.0758
5	55.3764	36.664	41.007	48.4353	46.0865	48.7898	74.0731
6	54.7802	36.238	40.5304	48.0138	44.5225	49.35	73.7878
7	55.3234	36.5299	40.8719	48.4411	45.1182	48.9028	74.9721
$\varphi = 1.15:$							
2	55.3679	36.8684	40.9111	48.4786	45.1565	48.9493	74.0563
3	55.3352	36.6221	41.2803	48.4972	45.046	48.8257	74.0384
4	55.3715	36.5674	40.9137	49.5148	45.1557	48.9726	74.0845
5	55.3889	36.721	41.065	48.4034	46.5664	48.6841	74.081
6	54.5164	36.0909	40.3609	47.7924	44.2154	49.517	73.6633
7	55.313	36.5203	40.8627	48.4224	45.0933	48.8733	75.2905
$\varphi = 1.2:$							
2	55.3727	36.9709	40.9152	48.4732	45.1455	48.9367	74.0557
3	55.3291	36.6443	41.4117	48.4979	44.9965	48.77	74.0315
4	55.3779	36.5708	40.919	49.8667	45.144	48.9675	74.0935
5	55.4	36.7718	41.1167	48.375	46.994	48.5899	74.088
6	54.2598	35.9477	40.1959	47.577	43.9166	49.6794	73.5421
7	55.2927	36.5014	40.8445	48.3858	45.0445	48.8156	75.9142
$\varphi = 1.25:$							
2	55.3778	37.0771	40.9195	48.4677	45.1341	48.9237	74.055
3	55.3229	36.6664	41.5428	48.4987	44.9471	48.7144	74.0246
4	55.384	36.5741	40.924	50.2054	45.1327	48.9626	74.1022
5	55.4089	36.8125	41.1582	48.3522	47.3369	48.5144	74.0937
6	54.0323	35.8208	40.0497	47.386	43.6517	49.8234	73.4347
7	55.2911	36.4999	40.843	48.3828	45.0405	48.8109	75.9649

Table 4: Prices p^{*w} after technical changes for incremental changes in φ , contd.

	(1) Agrc.	(2) Mfg.	(3) Oth.Mfg.	(4) Cstrt.	(5) Bus.Svcs.	(6) Cns.Svcs.	(7) Soc.Svcs.
$\varphi = 1.3:$							
2	55.3834	37.1963	40.9242	48.4615	45.1214	48.9091	74.0543
3	55.3176	36.6856	41.6564	48.4994	44.9044	48.6663	74.0187
4	55.3917	36.5782	40.9304	50.6338	45.1184	48.9565	74.1132
5	55.42	36.8631	41.2097	48.3239	47.763	48.4205	74.1007
6	53.8143	35.6992	39.9096	47.2029	43.3978	49.9614	73.3317
7	55.2788	36.4884	40.832	48.3606	45.011	48.7759	76.3429
$\varphi = 1.35:$							
2	55.3873	37.2782	40.9275	48.4572	45.1126	48.899	74.0538
3	55.3123	36.7047	41.7693	48.5001	44.8618	48.6185	74.0128
4	55.3961	36.5806	40.934	50.8812	45.1102	48.9529	74.1195
5	55.433	36.9223	41.27	48.2908	48.2616	48.3107	74.109
6	53.5823	35.5698	39.7605	47.0081	43.1276	50.1083	73.2222
7	55.257	36.4682	40.8125	48.3213	44.9587	48.7141	77.0105
$\varphi = 1.4:$							
2	55.3915	37.3667	40.9311	48.4525	45.1031	48.8882	74.0532
3	55.3046	36.7322	41.9323	48.5011	44.8004	48.5495	74.0043
4	55.4012	36.5833	40.9382	51.1636	45.1008	48.9488	74.1268
5	55.4432	36.9691	41.3177	48.2646	48.6559	48.2238	74.1155
6	53.3911	35.4631	39.6376	46.8476	42.905	50.2293	73.132
7	55.2307	36.4437	40.7889	48.2738	44.8954	48.6392	77.8198
$\varphi = 1.45:$							
2	55.3963	37.4672	40.9351	48.4473	45.0924	48.8758	74.0526
3	55.3004	36.7474	42.0223	48.5016	44.7666	48.5113	73.9996
4	55.4113	36.5887	40.9465	51.7198	45.0822	48.9408	74.1411
5	55.45	37.0001	41.3493	48.2472	48.9174	48.1662	74.1198
6	53.1849	35.3481	39.5051	46.6745	42.6648	50.3598	73.0346
7	55.232	36.4449	40.7901	48.2762	44.8986	48.643	77.779
$\varphi = 1.5:$							
2	55.4004	37.5556	40.9387	48.4427	45.0829	48.865	74.0521
3	55.2954	36.7657	42.1305	48.5023	44.7258	48.4655	73.994
4	55.4127	36.5895	40.9477	51.8018	45.0795	48.9396	74.1432
5	55.4602	37.0465	41.3966	48.2212	49.3086	48.08	74.1262
6	53.0081	35.2494	39.3914	46.5261	42.4589	50.4717	72.9511
7	55.206	36.4208	40.7668	48.2292	44.8361	48.569	78.5779

Table 5: Prices p^{*w} after technical changes for incremental changes in φ , contd.

	(1) Agrc.	(2) Mfg.	(3) Oth.Mfg.	(4) Cstrt.	(5) Bus.Svcs.	(6) Cns.Svcs.	(7) Soc.Svcs.
$\varphi = 1.55:$							
2	55.405	37.6511	40.9425	48.4377	45.0727	48.8533	74.0515
3	55.2867	36.797	42.3159	48.5034	44.656	48.387	73.9843
4	55.4236	36.5953	40.9567	52.4055	45.0593	48.9309	74.1587
5	55.4681	37.0825	41.4332	48.2011	49.6111	48.0134	74.1312
6	52.8279	35.1489	39.2757	46.3748	42.2491	50.5858	72.8661
7	55.2187	36.4325	40.7781	48.2521	44.8665	48.605	78.189
$\varphi = 1.6:$							
2	55.4121	37.8003	40.9485	48.4299	45.0567	48.835	74.0505
3	55.2833	36.8092	42.3879	48.5038	44.6289	48.3565	73.9805
4	55.4299	36.5986	40.9618	52.7536	45.0477	48.9258	74.1676
5	55.4797	37.1355	41.4872	48.1714	50.0583	47.9149	74.1386
6	52.675	35.0636	39.1774	46.2464	42.071	50.6826	72.7938
7	55.1955	36.411	40.7574	48.2102	44.8108	48.5392	78.9004
$\varphi = 1.65:$							
2	55.4182	37.9307	40.9537	48.4231	45.0427	48.819	74.0497
3	55.2788	36.8254	42.4837	48.5044	44.5928	48.3159	73.9755
4	55.4347	36.6012	40.9658	53.022	45.0388	48.922	74.1745
5	55.4869	37.1686	41.5209	48.1529	50.3371	47.8534	74.1432
6	52.5089	34.971	39.0706	46.107	41.8777	50.7877	72.7155
7	55.2008	36.4159	40.7621	48.2197	44.8234	48.5541	78.7397
$\varphi = 1.7:$							
2	55.4193	37.954	40.9547	48.4218	45.0402	48.8162	74.0496
3	55.2732	36.8456	42.6036	48.5051	44.5476	48.2651	73.9692
4	55.4414	36.6048	40.9713	53.3921	45.0264	48.9166	74.184
5	55.498	37.2193	41.5725	48.1245	50.7636	47.7595	74.1502
6	52.3397	34.8766	38.9619	45.965	41.6807	50.8948	72.6356
7	55.1681	36.3855	40.7328	48.1607	44.7449	48.4612	79.7434
$\varphi = 1.75:$							
2	55.4254	38.0809	40.9598	48.4152	45.0266	48.8006	74.0488
3	55.2683	36.8633	42.7083	48.5058	44.5082	48.2207	73.9638
4	55.4423	36.6053	40.972	53.4395	45.0249	48.9159	74.1852
5	55.5037	37.2453	41.599	48.11	50.9826	47.7112	74.1538
6	52.2135	34.8062	38.8808	45.859	41.5337	50.9747	72.576
7	55.1249	36.3453	40.6941	48.0827	44.641	48.3383	81.0707

Table 6: Prices p^{*w} after technical changes for incremental changes in φ , contd.

	(1) Agrc.	(2) Mfg.	(3) Oth.Mfg.	(4) Cstrt.	(5) Bus.Svcs.	(6) Cns.Svcs.	(7) Soc.Svcs.
$\varphi = 1.8:$							
2	55.4306	38.1917	40.9642	48.4094	45.0148	48.787	74.0481
3	55.2617	36.887	42.8489	48.5066	44.4553	48.1612	73.9564
4	55.4459	36.6072	40.975	53.6431	45.0181	48.913	74.1904
5	55.5168	37.3048	41.6596	48.0767	51.4843	47.6007	74.1621
6	52.0499	34.7149	38.7756	45.7216	41.3431	51.0783	72.4987
7	55.1077	36.3293	40.6786	48.0515	44.5996	48.2893	81.6002
$\varphi = 1.85:$							
2	55.4348	38.2799	40.9678	48.4048	45.0053	48.7762	74.0475
3	55.2581	36.8997	42.9239	48.5071	44.427	48.1294	73.9525
4	55.4602	36.6149	40.9868	54.4364	44.9916	48.9015	74.2108
5	55.522	37.3287	41.684	48.0633	51.6857	47.5564	74.1654
6	51.9168	34.6407	38.6901	45.6099	41.1881	51.1625	72.4359
7	55.1306	36.3505	40.6992	48.0929	44.6546	48.3544	80.897
$\varphi = 1.9:$							
2	55.439	38.3686	40.9713	48.4002	44.9958	48.7653	74.047
3	55.2527	36.9192	43.0394	48.5078	44.3835	48.0805	73.9465
4	55.4679	36.619	40.9931	54.8621	44.9774	48.8954	74.2217
5	55.5273	37.3527	41.7084	48.0498	51.888	47.5118	74.1688
6	51.8071	34.5795	38.6196	45.5178	41.0605	51.2319	72.3841
7	55.1313	36.3513	40.6998	48.0943	44.6564	48.3566	80.8732
$\varphi = 1.95:$							
2	55.4437	38.4685	40.9753	48.3949	44.9851	48.7531	74.0464
3	55.2443	36.9497	43.2201	48.5088	44.3155	48.0039	73.9371
4	55.4656	36.6177	40.9913	54.735	44.9817	48.8972	74.2185
5	55.5365	37.3948	41.7513	48.0263	52.2423	47.4338	74.1746
6	51.6421	34.4875	38.5136	45.3793	40.8683	51.3364	72.3062
7	55.0681	36.2924	40.6432	47.98	44.5044	48.1767	82.8166
$\varphi = 2.:$							
2	55.4521	38.6456	40.9825	48.3857	44.9662	48.7314	74.0453
3	55.2405	36.9632	43.2997	48.5093	44.2855	47.9702	73.9329
4	55.4808	36.6259	41.0038	55.5777	44.9536	48.885	74.2401
5	55.5416	37.4182	41.775	48.0132	52.439	47.3904	74.1779
6	51.5345	34.4274	38.4444	45.2889	40.743	51.4045	72.2554
7	55.1188	36.3396	40.6886	48.0717	44.6264	48.3211	81.2573

Table 7: Labour values v^* after technical changes for incremental changes in φ

	(1) Agrc.	(2) Mfg.	(3) Oth.Mfg.	(4) Cstrt.	(5) Bus.Svcs.	(6) Cns.Svcs.	(7) Soc.Svcs.
$\varphi = 1.05:$							
2	55.358	36.66	40.9027	48.4895	45.1788	48.9748	74.0576
3	55.3468	36.5805	41.0341	48.4957	45.1387	48.93	74.0512
4	55.3596	36.561	40.9039	48.8516	45.1779	48.9822	74.0674
5	55.3655	36.6141	40.9562	48.4632	45.666	48.8824	74.0661
6	55.0608	36.3945	40.7107	48.2494	44.8493	49.1724	73.9203
7	55.3376	36.5432	40.8847	48.4668	45.1525	48.9433	74.5347
$\varphi = 1.1:$							
2	55.3631	36.769	40.9071	48.4838	45.1671	48.9614	74.057
3	55.341	36.6011	41.1564	48.4964	45.0927	48.8781	74.0448
4	55.3654	36.5642	40.9087	49.1773	45.167	48.9775	74.0758
5	55.3764	36.664	41.007	48.4353	46.0865	48.7898	74.0731
6	54.7802	36.238	40.5304	48.0138	44.5225	49.35	73.7878
7	55.3234	36.5299	40.8719	48.4411	45.1182	48.9028	74.9721
$\varphi = 1.15:$							
2	55.3679	36.8684	40.9111	48.4786	45.1565	48.9493	74.0563
3	55.3352	36.6221	41.2803	48.4972	45.046	48.8257	74.0384
4	55.3715	36.5674	40.9137	49.5148	45.1557	48.9726	74.0845
5	55.3889	36.721	41.065	48.4034	46.5664	48.6841	74.081
6	54.5164	36.0909	40.3609	47.7924	44.2154	49.517	73.6633
7	55.313	36.5203	40.8627	48.4224	45.0933	48.8733	75.2905
$\varphi = 1.2:$							
2	55.3727	36.9709	40.9152	48.4732	45.1455	48.9367	74.0557
3	55.3291	36.6443	41.4117	48.4979	44.9965	48.77	74.0315
4	55.3779	36.5708	40.919	49.8667	45.144	48.9675	74.0935
5	55.4	36.7718	41.1167	48.375	46.994	48.5899	74.088
6	54.2598	35.9477	40.1959	47.577	43.9166	49.6794	73.5421
7	55.2927	36.5014	40.8445	48.3858	45.0445	48.8156	75.9142
$\varphi = 1.25:$							
2	55.3778	37.0771	40.9195	48.4677	45.1341	48.9237	74.055
3	55.3229	36.6664	41.5428	48.4987	44.9471	48.7144	74.0246
4	55.384	36.5741	40.924	50.2054	45.1327	48.9626	74.1022
5	55.4089	36.8125	41.1582	48.3522	47.3369	48.5144	74.0937
6	54.0323	35.8208	40.0497	47.386	43.6517	49.8234	73.4347
7	55.2911	36.4999	40.843	48.3828	45.0405	48.8109	75.9649

Table 8: Labour values v^* after technical changes for incremental changes in φ , contd.

	(1) Agrc.	(2) Mfg.	(3) Oth.Mfg.	(4) Cstrt.	(5) Bus.Svcs.	(6) Cns.Svcs.	(7) Soc.Svcs.
$\varphi = 1.3:$							
2	55.3834	37.1963	40.9242	48.4615	45.1214	48.9091	74.0543
3	55.3176	36.6856	41.6564	48.4994	44.9044	48.6663	74.0187
4	55.3917	36.5782	40.9304	50.6338	45.1184	48.9565	74.1132
5	55.42	36.8631	41.2097	48.3239	47.763	48.4205	74.1007
6	53.8143	35.6992	39.9096	47.2029	43.3978	49.9614	73.3317
7	55.2788	36.4884	40.832	48.3606	45.011	48.7759	76.3429
$\varphi = 1.35:$							
2	55.3873	37.2782	40.9275	48.4572	45.1126	48.899	74.0538
3	55.3123	36.7047	41.7693	48.5001	44.8618	48.6185	74.0128
4	55.3961	36.5806	40.934	50.8812	45.1102	48.9529	74.1195
5	55.433	36.9223	41.27	48.2908	48.2616	48.3107	74.109
6	53.5823	35.5698	39.7605	47.0081	43.1276	50.1083	73.2222
7	55.257	36.4682	40.8125	48.3213	44.9587	48.7141	77.0105
$\varphi = 1.4:$							
2	55.3915	37.3667	40.9311	48.4525	45.1031	48.8882	74.0532
3	55.3046	36.7322	41.9323	48.5011	44.8004	48.5495	74.0043
4	55.4012	36.5833	40.9382	51.1636	45.1008	48.9488	74.1268
5	55.4432	36.9691	41.3177	48.2646	48.6559	48.2238	74.1155
6	53.3911	35.4631	39.6376	46.8476	42.905	50.2293	73.132
7	55.2307	36.4437	40.7889	48.2738	44.8954	48.6392	77.8198
$\varphi = 1.45:$							
2	55.3963	37.4672	40.9351	48.4473	45.0924	48.8758	74.0526
3	55.3004	36.7474	42.0223	48.5016	44.7666	48.5113	73.9996
4	55.4113	36.5887	40.9465	51.7198	45.0822	48.9408	74.1411
5	55.45	37.0001	41.3493	48.2472	48.9174	48.1662	74.1198
6	53.1849	35.3481	39.5051	46.6745	42.6648	50.3598	73.0346
7	55.232	36.4449	40.7901	48.2762	44.8986	48.643	77.779
$\varphi = 1.5:$							
2	55.4004	37.5556	40.9387	48.4427	45.0829	48.865	74.0521
3	55.2954	36.7657	42.1305	48.5023	44.7258	48.4655	73.994
4	55.4127	36.5895	40.9477	51.8018	45.0795	48.9396	74.1432
5	55.4602	37.0465	41.3966	48.2212	49.3086	48.08	74.1262
6	53.0081	35.2494	39.3914	46.5261	42.4589	50.4717	72.9511
7	55.206	36.4208	40.7668	48.2292	44.8361	48.569	78.5779

Table 9: Labour values v^* after technical changes for incremental changes in φ , contd.

	(1) Agrc.	(2) Mfg.	(3) Oth.Mfg.	(4) Cstrt.	(5) Bus.Svcs.	(6) Cns.Svcs.	(7) Soc.Svcs.
$\varphi = 1.55:$							
2	55.405	37.6511	40.9425	48.4377	45.0727	48.8533	74.0515
3	55.2867	36.797	42.3159	48.5034	44.656	48.387	73.9843
4	55.4236	36.5953	40.9567	52.4055	45.0593	48.9309	74.1587
5	55.4681	37.0825	41.4332	48.2011	49.6111	48.0134	74.1312
6	52.8279	35.1489	39.2757	46.3748	42.2491	50.5858	72.8661
7	55.2187	36.4325	40.7781	48.2521	44.8665	48.605	78.189
$\varphi = 1.6:$							
2	55.4121	37.8003	40.9485	48.4299	45.0567	48.835	74.0505
3	55.2833	36.8092	42.3879	48.5038	44.6289	48.3565	73.9805
4	55.4299	36.5986	40.9618	52.7536	45.0477	48.9258	74.1676
5	55.4797	37.1355	41.4872	48.1714	50.0583	47.9149	74.1386
6	52.675	35.0636	39.1774	46.2464	42.071	50.6826	72.7938
7	55.1955	36.411	40.7574	48.2102	44.8108	48.5392	78.9004
$\varphi = 1.65:$							
2	55.4182	37.9307	40.9537	48.4231	45.0427	48.819	74.0497
3	55.2788	36.8254	42.4837	48.5044	44.5928	48.3159	73.9755
4	55.4347	36.6012	40.9658	53.022	45.0388	48.922	74.1745
5	55.4869	37.1686	41.5209	48.1529	50.3371	47.8534	74.1432
6	52.5089	34.971	39.0706	46.107	41.8777	50.7877	72.7155
7	55.2008	36.4159	40.7621	48.2197	44.8234	48.5541	78.7397
$\varphi = 1.7:$							
2	55.4193	37.954	40.9547	48.4218	45.0402	48.8162	74.0496
3	55.2732	36.8456	42.6036	48.5051	44.5476	48.2651	73.9692
4	55.4414	36.6048	40.9713	53.3921	45.0264	48.9166	74.184
5	55.498	37.2193	41.5725	48.1245	50.7636	47.7595	74.1502
6	52.3397	34.8766	38.9619	45.965	41.6807	50.8948	72.6356
7	55.1681	36.3855	40.7328	48.1607	44.7449	48.4612	79.7434
$\varphi = 1.75:$							
2	55.4254	38.0809	40.9598	48.4152	45.0266	48.8006	74.0488
3	55.2683	36.8633	42.7083	48.5058	44.5082	48.2207	73.9638
4	55.4423	36.6053	40.972	53.4395	45.0249	48.9159	74.1852
5	55.5037	37.2453	41.599	48.11	50.9826	47.7112	74.1538
6	52.2135	34.8062	38.8808	45.859	41.5337	50.9747	72.576
7	55.1249	36.3453	40.6941	48.0827	44.641	48.3383	81.0707

Table 10: Labour values v^* after technical changes for incremental changes in φ , contd.

	(1) Agrc.	(2) Mfg.	(3) Oth.Mfg.	(4) Cstrt.	(5) Bus.Svcs.	(6) Cns.Svcs.	(7) Soc.Svcs.
$\varphi = 1.8:$							
2	55.4306	38.1917	40.9642	48.4094	45.0148	48.787	74.0481
3	55.2617	36.887	42.8489	48.5066	44.4553	48.1612	73.9564
4	55.4459	36.6072	40.975	53.6431	45.0181	48.913	74.1904
5	55.5168	37.3048	41.6596	48.0767	51.4843	47.6007	74.1621
6	52.0499	34.7149	38.7756	45.7216	41.3431	51.0783	72.4987
7	55.1077	36.3293	40.6786	48.0515	44.5996	48.2893	81.6002
$\varphi = 1.85:$							
2	55.4348	38.2799	40.9678	48.4048	45.0053	48.7762	74.0475
3	55.2581	36.8997	42.9239	48.5071	44.427	48.1294	73.9525
4	55.4602	36.6149	40.9868	54.4364	44.9916	48.9015	74.2108
5	55.522	37.3287	41.684	48.0633	51.6857	47.5564	74.1654
6	51.9168	34.6407	38.6901	45.6099	41.1881	51.1625	72.4359
7	55.1306	36.3505	40.6992	48.0929	44.6546	48.3544	80.897
$\varphi = 1.9:$							
2	55.439	38.3686	40.9713	48.4002	44.9958	48.7653	74.047
3	55.2527	36.9192	43.0394	48.5078	44.3835	48.0805	73.9465
4	55.4679	36.619	40.9931	54.8621	44.9774	48.8954	74.2217
5	55.5273	37.3527	41.7084	48.0498	51.888	47.5118	74.1688
6	51.8071	34.5795	38.6196	45.5178	41.0605	51.2319	72.3841
7	55.1313	36.3513	40.6998	48.0943	44.6564	48.3566	80.8732
$\varphi = 1.95:$							
2	55.4437	38.4685	40.9753	48.3949	44.9851	48.7531	74.0464
3	55.2443	36.9497	43.2201	48.5088	44.3155	48.0039	73.9371
4	55.4656	36.6177	40.9913	54.735	44.9817	48.8972	74.2185
5	55.5365	37.3948	41.7513	48.0263	52.2423	47.4338	74.1746
6	51.6421	34.4875	38.5136	45.3793	40.8683	51.3364	72.3062
7	55.0681	36.2924	40.6432	47.98	44.5044	48.1767	82.8166
$\varphi = 2.:$							
2	55.4521	38.6456	40.9825	48.3857	44.9662	48.7314	74.0453
3	55.2405	36.9632	43.2997	48.5093	44.2855	47.9702	73.9329
4	55.4808	36.6259	41.0038	55.5777	44.9536	48.885	74.2401
5	55.5416	37.4182	41.775	48.0132	52.439	47.3904	74.1779
6	51.5345	34.4274	38.4444	45.2889	40.743	51.4045	72.2554
7	55.1188	36.3396	40.6886	48.0717	44.6264	48.3211	81.2573

2 Reference sector: $m = 2$

This section shows results for an alternative selection of the reference sector m . In the results below, $m = 2$. Figure 4 shows the initial wage-profit curve. Figure 5 shows the wage-profit curves for technical changes in all sectors except the reference sector, $j = 1, 3, \dots, 7$, at different values of φ . For ease of comparison, initial profitability indicators are: $r_m = 0.056$, $r = 0.111865$, $\bar{r} = 0.148386$. In Figure 5 $\varphi = 1, 1.2, 1.4, 1.6, 1.8, 2$, as noted at the top of each diagram. Table 11 shows changes in aggregate profitability for technical changes in the sectors denoted by the column labels at different values of φ : the results are consistent with those reported in the paper. Tables 12 and 13 respectively show post-technical change prices p^{*w} and labour values v^* , with the sector j in which technical change takes place noted by the label for each row or prices and values.

Figure 4: Initial wage-profit (ω_m - r_m) curve, $m = 2$

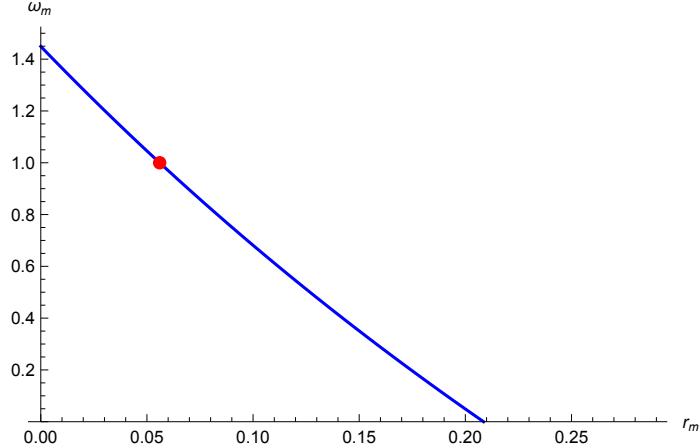


Figure 5: Wage-profit (ω_m - r_m) curves for incremental changes in φ , $m = 2$

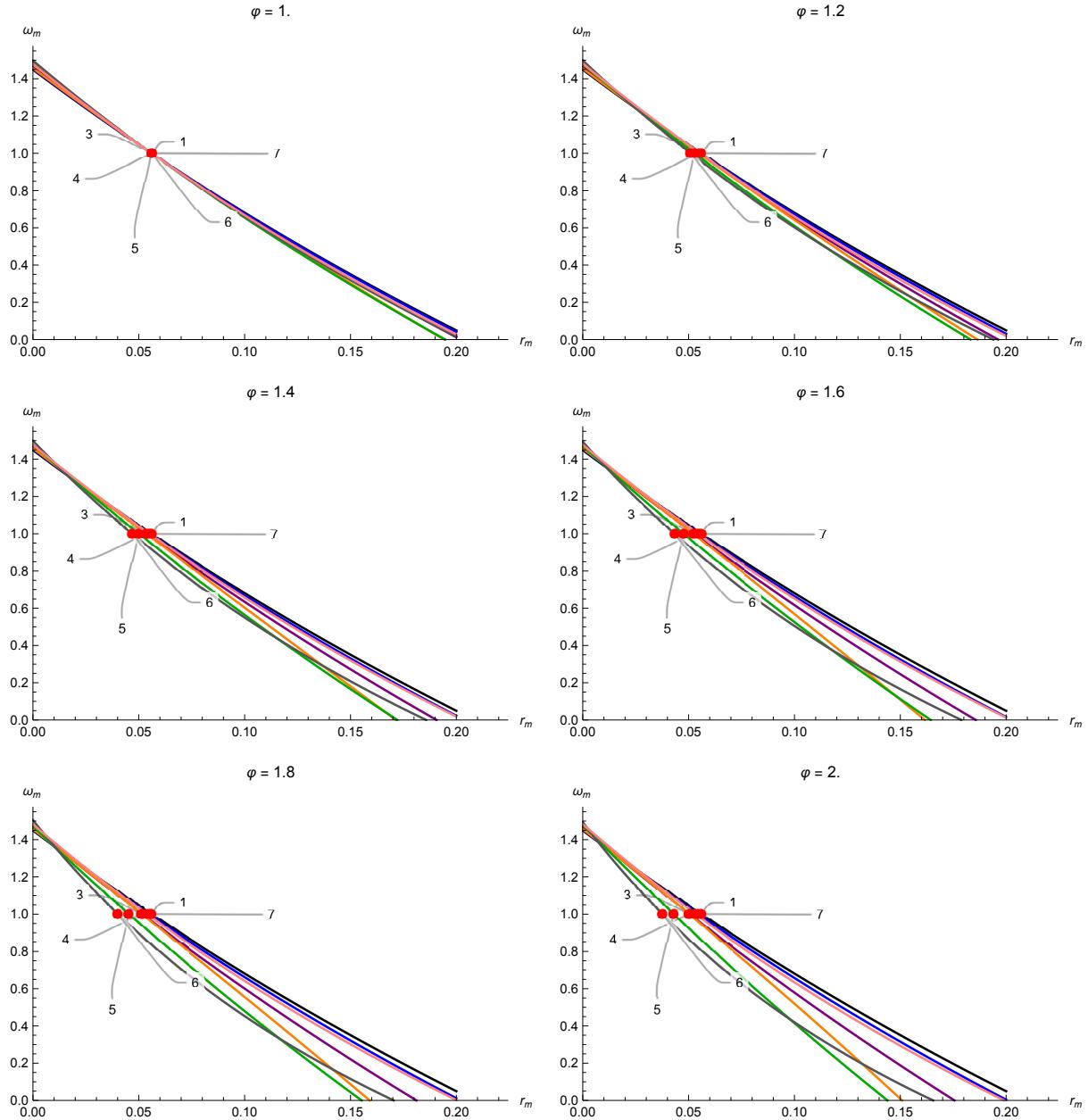


Table 11: Profitability after technical changes for incremental changes in φ , $m = 2$

	(1) Agrc.	(3) Oth.Mfg.	(4) Cstrt.	(5) Bus.Svcs.	(6) Cns.Svcs.	(7) Soc.Svcs.
$\varphi = 1.:$						
r_m	0.056	0.056	0.056	0.056	0.056	0.056
r	0.1142	0.1115	0.1161	0.1149	0.114	0.1315
\bar{r}	0.15	0.1485	0.16	0.1506	0.1493	0.1659
$\varphi = 1.2:$						
r_m	0.05567	0.05482	0.05477	0.05278	0.051	0.05542
r	0.1194	0.1105	0.1165	0.113	0.1106	0.1376
\bar{r}	0.1519	0.1471	0.1657	0.1464	0.1404	0.1706
$\varphi = 1.4:$						
r_m	0.05533	0.05367	0.05339	0.04995	0.04683	0.05497
r	0.1234	0.1093	0.1202	0.1113	0.1079	0.1372
\bar{r}	0.1533	0.1456	0.1861	0.1425	0.1332	0.1698
$\varphi = 1.6:$						
r_m	0.05501	0.05254	0.0521	0.04755	0.04334	0.05446
r	0.127	0.1084	0.1224	0.1096	0.1053	0.142
\bar{r}	0.1545	0.1443	0.2001	0.1391	0.1271	0.1736
$\varphi = 1.8:$						
r_m	0.05475	0.05155	0.05127	0.04529	0.04015	0.05375
r	0.1288	0.1072	0.1217	0.1084	0.1043	0.1509
\bar{r}	0.1549	0.1428	0.2008	0.1362	0.1222	0.1808
$\varphi = 2.:$						
r_m	0.05443	0.05037	0.05011	0.04293	0.03766	0.05315
r	0.132	0.1063	0.1236	0.1086	0.1014	0.1565
\bar{r}	0.1559	0.1415	0.214	0.1345	0.1169	0.185

Table 12: Prices p^{*w} after technical changes for incremental changes in φ , $m = 2$

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Agrc.	Mfg.	Oth.Mfg.	Cstrt.	Bus.Svcs.	Cns.Svcs.	Soc.Svcs.
$\varphi = 1.:$							
1	41.1872	27.2018	30.4319	36.0841	33.6248	36.4505	55.1053
3	41.1872	27.2018	30.4319	36.0841	33.6248	36.4505	55.1053
4	41.1872	27.2018	30.4319	36.0841	33.6248	36.4505	55.1053
5	41.1872	27.2018	30.4319	36.0841	33.6248	36.4505	55.1053
6	41.1872	27.2018	30.4319	36.0841	33.6248	36.4505	55.1053
7	41.1872	27.2018	30.4319	36.0841	33.6248	36.4505	55.1053
$\varphi = 1.2:$							
1	42.3062	27.2	30.4866	36.0647	33.574	36.4002	55.0933
3	41.1693	27.2663	30.8135	36.0864	33.4811	36.2889	55.0854
4	41.2054	27.2115	30.4469	37.095	33.5911	36.4359	55.1313
5	41.2221	27.3613	30.5943	35.9948	34.9686	36.1545	55.1275
6	40.3771	26.7499	29.9112	35.4039	32.6814	36.9634	54.7229
7	41.1413	27.1591	30.3908	36.0012	33.5145	36.3201	56.5147
$\varphi = 1.4:$							
1	43.4536	27.1983	30.5427	36.0447	33.522	36.3486	55.081
3	41.1519	27.3288	31.1839	36.0886	33.3416	36.132	55.0661
4	41.2264	27.2227	30.4641	38.2573	33.5524	36.4192	55.1611
5	41.2532	27.5031	30.7387	35.9155	36.1628	35.8915	55.1472
6	39.724	26.3856	29.4915	34.8557	31.921	37.3767	54.4145
7	41.1067	27.1269	30.3598	35.9388	33.4313	36.2217	57.5778
$\varphi = 1.6:$							
1	44.5257	27.1966	30.5951	36.0261	33.4733	36.3003	55.0695
3	41.1347	27.391	31.5517	36.0908	33.2031	35.9762	55.0469
4	41.2466	27.2335	30.4808	39.3769	33.515	36.403	55.1899
5	41.2797	27.6241	30.8619	35.8478	37.182	35.6669	55.164
6	39.1902	26.0878	29.1484	34.4075	31.2993	37.7146	54.1625
7	41.0665	27.0896	30.3237	35.8662	33.3347	36.1074	58.8124
$\varphi = 1.8:$							
1	45.4051	27.1952	30.6381	36.0109	33.4334	36.2608	55.0601
3	41.1194	27.4459	31.8772	36.0928	33.0805	35.8383	55.0299
4	41.2599	27.2407	30.4918	40.1192	33.4903	36.3923	55.2089
5	41.3047	27.7385	30.9784	35.7837	38.1455	35.4547	55.1799
6	38.7152	25.8228	28.8431	34.0087	30.7462	38.0153	53.9383
7	41.0116	27.0385	30.2745	35.767	33.2026	35.9512	60.5002
$\varphi = 2.:$							
1	46.475	27.1935	30.6904	35.9923	33.3849	36.2126	55.0486
3	41.1013	27.5113	32.2642	36.0951	32.9348	35.6744	55.0097
4	41.279	27.2509	30.5075	41.1749	33.4551	36.377	55.236
5	41.3312	27.8594	31.1016	35.716	39.1647	35.2302	55.1967
6	38.3498	25.619	28.6083	33.702	30.3207	38.2466	53.7657
7	40.9648	26.9949	30.2326	35.6825	33.0901	35.8182	61.9379

Table 13: Labour values v^* after technical changes for incremental changes in φ , $m = 2$

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Agrc.	Mfg.	Oth.Mfg.	Cstrt.	Bus.Svcs.	Cns.Svcs.	Soc.Svcs.
$\varphi = 1.:$							
1	41.1872	27.2018	30.4319	36.0841	33.6248	36.4505	55.1053
3	41.1872	27.2018	30.4319	36.0841	33.6248	36.4505	55.1053
4	41.1872	27.2018	30.4319	36.0841	33.6248	36.4505	55.1053
5	41.1872	27.2018	30.4319	36.0841	33.6248	36.4505	55.1053
6	41.1872	27.2018	30.4319	36.0841	33.6248	36.4505	55.1053
7	41.1872	27.2018	30.4319	36.0841	33.6248	36.4505	55.1053
$\varphi = 1.2:$							
1	42.3062	27.2	30.4866	36.0647	33.574	36.4002	55.0933
3	41.1693	27.2663	30.8135	36.0864	33.4811	36.2889	55.0854
4	41.2054	27.2115	30.4469	37.095	33.5911	36.4359	55.1313
5	41.2221	27.3613	30.5943	35.9948	34.9686	36.1545	55.1275
6	40.3771	26.7499	29.9112	35.4039	32.6814	36.9634	54.7229
7	41.1413	27.1591	30.3908	36.0012	33.5145	36.3201	56.5147
$\varphi = 1.4:$							
1	43.4536	27.1983	30.5427	36.0447	33.522	36.3486	55.081
3	41.1519	27.3288	31.1839	36.0886	33.3416	36.132	55.0661
4	41.2264	27.2227	30.4641	38.2573	33.5524	36.4192	55.1611
5	41.2532	27.5031	30.7387	35.9155	36.1628	35.8915	55.1472
6	39.724	26.3856	29.4915	34.8557	31.921	37.3767	54.4145
7	41.1067	27.1269	30.3598	35.9388	33.4313	36.2217	57.5778
$\varphi = 1.6:$							
1	44.5257	27.1966	30.5951	36.0261	33.4733	36.3003	55.0695
3	41.1347	27.391	31.5517	36.0908	33.2031	35.9762	55.0469
4	41.2466	27.2335	30.4808	39.3769	33.515	36.403	55.1899
5	41.2797	27.6241	30.8619	35.8478	37.182	35.6669	55.164
6	39.1902	26.0878	29.1484	34.4075	31.2993	37.7146	54.1625
7	41.0665	27.0896	30.3237	35.8662	33.3347	36.1074	58.8124
$\varphi = 1.8:$							
1	45.4051	27.1952	30.6381	36.0109	33.4334	36.2608	55.0601
3	41.1194	27.4459	31.8772	36.0928	33.0805	35.8383	55.0299
4	41.2599	27.2407	30.4918	40.1192	33.4903	36.3923	55.2089
5	41.3047	27.7385	30.9784	35.7837	38.1455	35.4547	55.1799
6	38.7152	25.8228	28.8431	34.0087	30.7462	38.0153	53.9383
7	41.0116	27.0385	30.2745	35.767	33.2026	35.9512	60.5002
$\varphi = 2.:$							
1	46.475	27.1935	30.6904	35.9923	33.3849	36.2126	55.0486
3	41.1013	27.5113	32.2642	36.0951	32.9348	35.6744	55.0097
4	41.279	27.2509	30.5075	41.1749	33.4551	36.377	55.236
5	41.3312	27.8594	31.1016	35.716	39.1647	35.2302	55.1967
6	38.3498	25.619	28.6083	33.702	30.3207	38.2466	53.7657
7	40.9648	26.9949	30.2326	35.6825	33.0901	35.8182	61.9379

3 Reference sector: $m = 3$

This section shows results for an alternative selection of the reference sector m . In the results below, $m = 3$. Figure 6 shows the initial wage-profit curve. Figure 7 shows the wage-profit curves for technical changes in all sectors except the reference sector, $j = 1, 2, 4, \dots, 7$, at different values of φ . For ease of comparison, initial profitability indicators are: $r_m = 0.0551$, $r = 0.111865$, $\bar{r} = 0.148386$. In Figure 7 $\varphi = 1, 1.2, 1.4, 1.6, 1.8, 2$, as noted at the top of each diagram. Table 14 shows changes in aggregate profitability for technical changes in the sectors denoted by the column labels at different values of φ : the results are consistent with those reported in the paper. Tables 15 and 16 respectively show post-technical change prices p^{*w} and labour values v^* , with the sector j in which technical change takes place noted by the label for each row or prices and values.

Figure 6: Initial wage-profit (ω_m - r_m) curve, $m = 3$

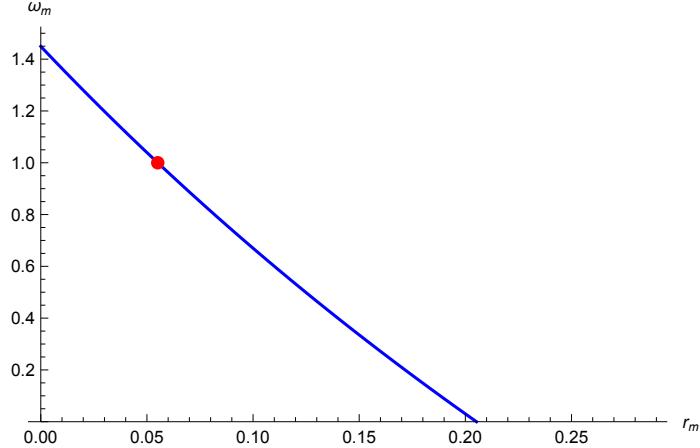


Figure 7: Wage-profit (ω_m - r_m) curves for incremental changes in φ , $m = 3$

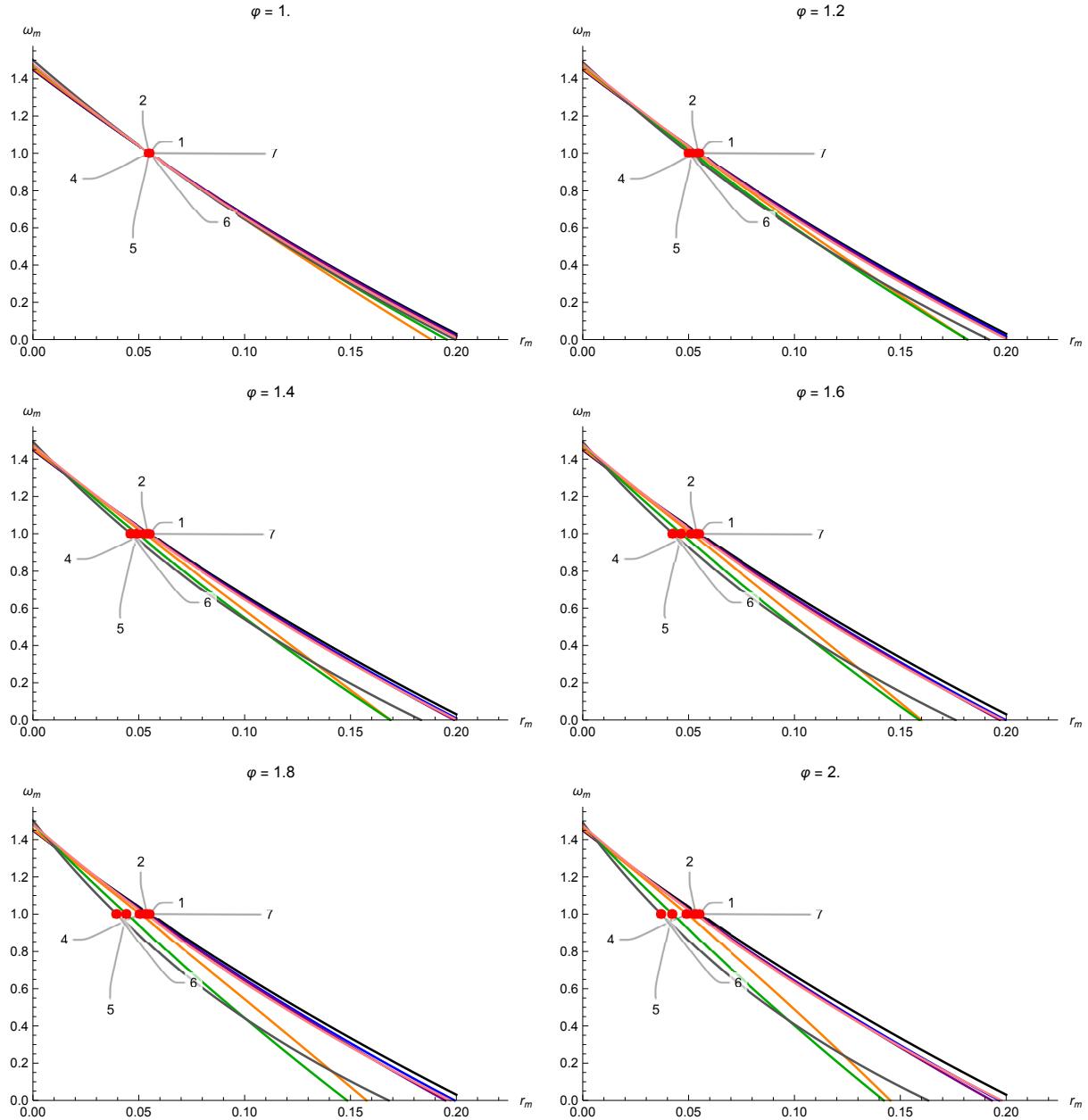


Table 14: Profitability after technical changes for incremental changes in φ , $m = 3$

	(1) Agrc.	(2) Mfg.	(4) Cstrt.	(5) Bus.Svcs.	(6) Cns.Svcs.	(7) Soc.Svcs.
$\varphi = 1.:$						
r_m	0.0551	0.0551	0.0551	0.0551	0.0551	0.0551
r	0.114	0.1116	0.1174	0.1136	0.1142	0.1305
\bar{r}	0.15	0.1485	0.1655	0.1494	0.1493	0.1652
$\varphi = 1.2:$						
r_m	0.05481	0.05477	0.05385	0.05197	0.05022	0.05458
r	0.1157	0.1119	0.1173	0.1125	0.1101	0.1341
\bar{r}	0.1503	0.1492	0.1694	0.146	0.1403	0.1676
$\varphi = 1.4:$						
r_m	0.0545	0.05443	0.05252	0.04911	0.0461	0.05413
r	0.1206	0.1122	0.1204	0.1117	0.1076	0.1359
\bar{r}	0.1521	0.15	0.1867	0.143	0.1331	0.1687
$\varphi = 1.6:$						
r_m	0.05415	0.05411	0.05131	0.04662	0.04263	0.0535
r	0.1259	0.1124	0.122	0.1103	0.105	0.1444
\bar{r}	0.154	0.1505	0.1973	0.1397	0.1266	0.1756
$\varphi = 1.8:$						
r_m	0.05392	0.05375	0.05051	0.0442	0.03955	0.05291
r	0.1274	0.1128	0.1213	0.11	0.1039	0.1502
\bar{r}	0.1543	0.1516	0.2004	0.1375	0.1219	0.18
$\varphi = 2.:$						
r_m	0.05347	0.05345	0.04907	0.0423	0.03705	0.05276
r	0.1349	0.1129	0.1249	0.1082	0.1015	0.147
\bar{r}	0.1572	0.1519	0.2187	0.1341	0.1172	0.1773

Table 15: Prices p^{*w} after technical changes for incremental changes in φ , $m = 3$

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Agrc.	Mfg.	Oth.Mfg.	Cstrt.	Bus.Svcs.	Cns.Svcs.	Soc.Svcs.
$\varphi = 1.:$							
1	44.0229	29.0746	32.5271	38.5685	35.9399	38.9602	58.8994
2	44.0229	29.0746	32.5271	38.5685	35.9399	38.9602	58.8994
4	44.0229	29.0746	32.5271	38.5685	35.9399	38.9602	58.8994
5	44.0229	29.0746	32.5271	38.5685	35.9399	38.9602	58.8994
6	44.0229	29.0746	32.5271	38.5685	35.9399	38.9602	58.8994
7	44.0229	29.0746	32.5271	38.5685	35.9399	38.9602	58.8994
$\varphi = 1.2:$							
1	45.0785	29.073	32.5787	38.5502	35.892	38.9127	58.888
2	44.0382	29.3962	32.54	38.5517	35.9055	38.9207	58.8973
4	44.043	29.0854	32.5437	39.6838	35.9027	38.9441	58.928
5	44.0599	29.2433	32.6988	38.4741	37.3604	38.6472	58.9228
6	43.1648	28.596	31.9756	37.8481	34.9406	39.5033	58.4942
7	43.9782	29.0331	32.487	38.4877	35.8324	38.8331	60.2728
$\varphi = 1.4:$							
1	46.2259	29.0712	32.6348	38.5302	35.8399	38.861	58.8757
2	44.0539	29.7274	32.5533	38.5343	35.87	38.8801	58.8953
4	44.0651	29.0972	32.5618	40.9069	35.8619	38.9264	58.9594
5	44.0938	29.3983	32.8567	38.3873	38.6664	38.3596	58.9443
6	42.4629	28.2044	31.5245	37.2588	34.1233	39.9476	58.1628
7	43.9402	28.9977	32.453	38.4191	35.741	38.725	61.4404
$\varphi = 1.6:$							
1	47.4909	29.0692	32.6967	38.5083	35.7825	38.8041	58.8621
2	44.0689	30.0435	32.566	38.5178	35.8362	38.8414	58.8933
4	44.0856	29.1082	32.5787	42.0449	35.824	38.91	58.9886
5	44.1238	29.5352	32.9961	38.3107	39.8193	38.1056	58.9633
6	41.8863	27.8828	31.1539	36.7747	33.4518	40.3126	57.8906
7	43.8865	28.9478	32.4049	38.3221	35.6119	38.5722	63.0906
$\varphi = 1.8:$							
1	48.3498	29.0679	32.7386	38.4934	35.7436	38.7655	58.8529
2	44.0857	30.3975	32.5802	38.4993	35.7982	38.798	58.8911
4	44.0996	29.1156	32.5902	42.8186	35.7982	38.8988	59.0084
5	44.153	29.6685	33.1319	38.2361	40.9422	37.8582	58.9819
6	41.3874	27.6045	30.8333	36.3558	32.8708	40.6284	57.655
7	43.8372	28.9018	32.3606	38.2329	35.4932	38.4318	64.6077
$\varphi = 2.:$							
1	49.9959	29.0653	32.8191	38.4648	35.6689	38.6914	58.8353
2	44.0994	30.6866	32.5918	38.4842	35.7673	38.7626	58.8893
4	44.1253	29.1294	32.6114	44.2463	35.7506	38.8782	59.0451
5	44.1761	29.7742	33.2396	38.177	41.8328	37.662	58.9966
6	40.9897	27.3826	30.5777	36.022	32.4078	40.8801	57.4673
7	43.8247	28.8902	32.3494	38.2104	35.4632	38.3964	64.9907

Table 16: Labour values v^* after technical changes for incremental changes in φ , $m = 3$

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Agrc.	Mfg.	Oth.Mfg.	Cstrt.	Bus.Svcs.	Cns.Svcs.	Soc.Svcs.
$\varphi = 1.:$							
1	44.0229	29.0746	32.5271	38.5685	35.9399	38.9602	58.8994
2	44.0229	29.0746	32.5271	38.5685	35.9399	38.9602	58.8994
4	44.0229	29.0746	32.5271	38.5685	35.9399	38.9602	58.8994
5	44.0229	29.0746	32.5271	38.5685	35.9399	38.9602	58.8994
6	44.0229	29.0746	32.5271	38.5685	35.9399	38.9602	58.8994
7	44.0229	29.0746	32.5271	38.5685	35.9399	38.9602	58.8994
$\varphi = 1.2:$							
1	45.0785	29.073	32.5787	38.5502	35.892	38.9127	58.888
2	44.0382	29.3962	32.54	38.5517	35.9055	38.9207	58.8973
4	44.043	29.0854	32.5437	39.6838	35.9027	38.9441	58.928
5	44.0599	29.2433	32.6988	38.4741	37.3604	38.6472	58.9228
6	43.1648	28.596	31.9756	37.8481	34.9406	39.5033	58.4942
7	43.9782	29.0331	32.487	38.4877	35.8324	38.8331	60.2728
$\varphi = 1.4:$							
1	46.2259	29.0712	32.6348	38.5302	35.8399	38.861	58.8757
2	44.0539	29.7274	32.5533	38.5343	35.87	38.8801	58.8953
4	44.0651	29.0972	32.5618	40.9069	35.8619	38.9264	58.9594
5	44.0938	29.3983	32.8567	38.3873	38.6664	38.3596	58.9443
6	42.4629	28.2044	31.5245	37.2588	34.1233	39.9476	58.1628
7	43.9402	28.9977	32.453	38.4191	35.741	38.725	61.4404
$\varphi = 1.6:$							
1	47.4909	29.0692	32.6967	38.5083	35.7825	38.8041	58.8621
2	44.0689	30.0435	32.566	38.5178	35.8362	38.8414	58.8933
4	44.0856	29.1082	32.5787	42.0449	35.824	38.91	58.9886
5	44.1238	29.5352	32.9961	38.3107	39.8193	38.1056	58.9633
6	41.8863	27.8828	31.1539	36.7747	33.4518	40.3126	57.8906
7	43.8865	28.9478	32.4049	38.3221	35.6119	38.5722	63.0906
$\varphi = 1.8:$							
1	48.3498	29.0679	32.7386	38.4934	35.7436	38.7655	58.8529
2	44.0857	30.3975	32.5802	38.4993	35.7982	38.798	58.8911
4	44.0996	29.1156	32.5902	42.8186	35.7982	38.8988	59.0084
5	44.153	29.6685	33.1319	38.2361	40.9422	37.8582	58.9819
6	41.3874	27.6045	30.8333	36.3558	32.8708	40.6284	57.655
7	43.8372	28.9018	32.3606	38.2329	35.4932	38.4318	64.6077
$\varphi = 2.:$							
1	49.9959	29.0653	32.8191	38.4648	35.6689	38.6914	58.8353
2	44.0994	30.6866	32.5918	38.4842	35.7673	38.7626	58.8893
4	44.1253	29.1294	32.6114	44.2463	35.7506	38.8782	59.0451
5	44.1761	29.7742	33.2396	38.177	41.8328	37.662	58.9966
6	40.9897	27.3826	30.5777	36.022	32.4078	40.8801	57.4673
7	43.8247	28.8902	32.3494	38.2104	35.4632	38.3964	64.9907

4 Reference sector: $m = 4$

This section shows results for an alternative selection of the reference sector m . In the results below, $m = 4$. Figure 8 shows the initial wage-profit curve. Figure 9 shows the wage-profit curves for technical changes in all sectors except the reference sector, $j = 1, \dots, 3, 5, \dots, 7$, at different values of φ . For ease of comparison, initial profitability indicators are: $r_m = 0.4739$, $r = 0.111865$, $\bar{r} = 0.148386$. In Figure 9 $\varphi = 1, 1.2, 1.4, 1.6, 1.8, 2$, as noted at the top of each diagram. Table 17 shows changes in aggregate profitability for technical changes in the sectors denoted by the column labels at different values of φ : the results are consistent with those reported in the paper. Tables 18 and 19 respectively show post-technical change prices p^{*w} and labour values v^* , with the sector j in which technical change takes place noted by the label for each row or prices and values.

Figure 8: Initial wage-profit (ω_m - r_m) curve, $m = 4$

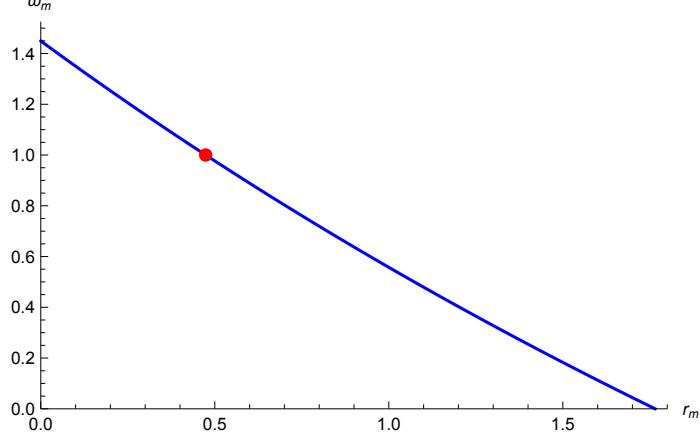


Figure 9: Wage-profit (ω_m - r_m) curves for incremental changes in φ , $m = 4$

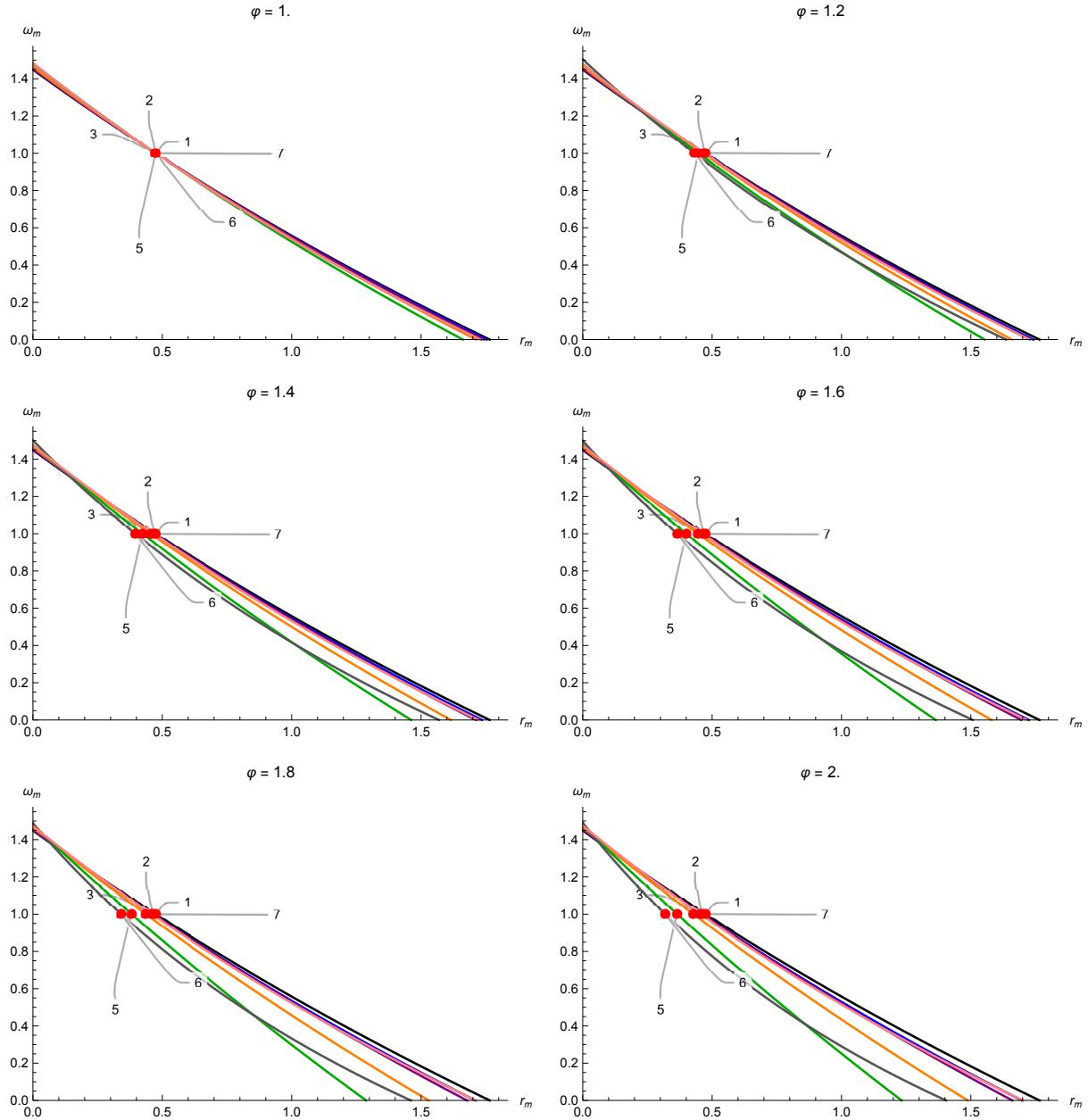


Table 17: Profitability after technical changes for incremental changes in φ , $m = 4$

	(1) Agrc.	(2) Mfg.	(3) Oth.Mfg.	(5) Bus.Svcs.	(6) Cns.Svcs.	(7) Soc.Svcs.
$\varphi = 1.:$						
r_m	0.4739	0.4739	0.4739	0.4739	0.4739	0.4739
r	0.113	0.1116	0.1115	0.1142	0.1129	0.1339
\bar{r}	0.1495	0.1486	0.1484	0.1499	0.1486	0.168
$\varphi = 1.2:$						
r_m	0.4712	0.471	0.4638	0.4467	0.4314	0.4696
r	0.1175	0.1118	0.1105	0.1129	0.1113	0.133
\bar{r}	0.1511	0.1492	0.1471	0.1464	0.1409	0.1667
$\varphi = 1.4:$						
r_m	0.469	0.4682	0.4542	0.4229	0.3962	0.4656
r	0.1189	0.112	0.1094	0.1111	0.1081	0.1356
\bar{r}	0.1513	0.1498	0.1456	0.1424	0.1334	0.1684
$\varphi = 1.6:$						
r_m	0.4664	0.4654	0.4454	0.4007	0.3663	0.4618
r	0.1232	0.1124	0.1081	0.1107	0.1056	0.1386
\bar{r}	0.1528	0.1507	0.144	0.1402	0.1272	0.1706
$\varphi = 1.8:$						
r_m	0.4634	0.4625	0.4356	0.3812	0.3413	0.4585
r	0.1282	0.1127	0.1073	0.1096	0.1029	0.1412
\bar{r}	0.1546	0.1513	0.1428	0.1374	0.1216	0.1727
$\varphi = 2.:$						
r_m	0.4606	0.4595	0.4268	0.3646	0.3187	0.4537
r	0.1323	0.1131	0.1061	0.1078	0.1014	0.1469
\bar{r}	0.156	0.1522	0.1414	0.1337	0.1171	0.1768

Table 18: Prices p^{*w} after technical changes for incremental changes in φ , $m = 4$

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Agrc.	Mfg.	Oth.Mfg.	Cstrt.	Bus.Svcs.	Cns.Svcs.	Soc.Svcs.
$\varphi = 1.:$							
1	36.8618	24.3451	27.236	32.2946	30.0936	32.6226	49.3183
2	36.8618	24.3451	27.236	32.2946	30.0936	32.6226	49.3183
3	36.8618	24.3451	27.236	32.2946	30.0936	32.6226	49.3183
5	36.8618	24.3451	27.236	32.2946	30.0936	32.6226	49.3183
6	36.8618	24.3451	27.236	32.2946	30.0936	32.6226	49.3183
7	36.8618	24.3451	27.236	32.2946	30.0936	32.6226	49.3183
$\varphi = 1.2:$							
1	37.8086	24.3437	27.2823	32.2782	30.0507	32.58	49.3082
2	36.8748	24.6189	27.247	32.2803	30.0643	32.5891	49.3166
3	36.8457	24.4031	27.5791	32.2967	29.9644	32.4773	49.3004
5	36.893	24.4877	27.3812	32.2149	31.2943	32.3581	49.3381
6	36.1335	23.9388	26.7679	31.6831	29.2455	33.0837	48.9745
7	36.8258	24.3117	27.2037	32.2296	30.0071	32.5203	50.4241
$\varphi = 1.4:$							
1	38.6119	24.3424	27.3216	32.2643	30.0142	32.5439	49.2996
2	36.8874	24.8847	27.2577	32.2664	30.0359	32.5565	49.315
3	36.8303	24.4587	27.9082	32.2987	29.8405	32.3378	49.2832
5	36.9206	24.6134	27.5092	32.1445	32.3535	32.1248	49.3556
6	35.5506	23.6137	26.3933	31.1938	28.5668	33.4526	48.6993
7	36.7931	24.2812	27.1744	32.1705	29.9283	32.4271	51.4309
$\varphi = 1.6:$							
1	39.5396	24.341	27.3669	32.2482	29.9721	32.5021	49.2896
2	36.9003	25.1564	27.2686	32.2522	30.0068	32.5232	49.3133
3	36.8161	24.5099	28.2112	32.3005	29.7264	32.2095	49.2674
5	36.9466	24.7323	27.6303	32.078	33.3547	31.9042	49.3721
6	35.0674	23.3441	26.0827	30.7881	28.004	33.7585	48.4711
7	36.7616	24.2519	27.1462	32.1136	29.8526	32.3375	52.3988
$\varphi = 1.8:$							
1	40.6033	24.3393	27.4189	32.2297	29.9239	32.4543	49.2782
2	36.9134	25.4316	27.2796	32.2378	29.9773	32.4894	49.3116
3	36.8002	24.5672	28.5503	32.3026	29.5987	32.0659	49.2497
5	36.9695	24.8368	27.7367	32.0195	34.235	31.7103	49.3867
6	34.6723	23.1238	25.8288	30.4564	27.5439	34.0086	48.2846
7	36.734	24.2262	27.1215	32.0638	29.7863	32.2591	53.2457
$\varphi = 2.:$							
1	41.6175	24.3377	27.4685	32.2121	29.8778	32.4086	49.2673
2	36.9269	25.7172	27.2911	32.2229	29.9467	32.4544	49.3098
3	36.7858	24.6191	28.8578	32.3044	29.4829	31.9356	49.2336
5	36.9892	24.9265	27.8281	31.9693	34.9911	31.5437	49.3991
6	34.3232	22.929	25.6044	30.1633	27.1374	34.2296	48.1198
7	36.6949	24.1899	27.0864	31.9932	29.6923	32.148	54.4465

Table 19: Labour values v^* after technical changes for incremental changes in φ , $m = 4$

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Agrc.	Mfg.	Oth.Mfg.	Cstrt.	Bus.Svcs.	Cns.Svcs.	Soc.Svcs.
$\varphi = 1.:$							
1	36.8618	24.3451	27.236	32.2946	30.0936	32.6226	49.3183
2	36.8618	24.3451	27.236	32.2946	30.0936	32.6226	49.3183
3	36.8618	24.3451	27.236	32.2946	30.0936	32.6226	49.3183
5	36.8618	24.3451	27.236	32.2946	30.0936	32.6226	49.3183
6	36.8618	24.3451	27.236	32.2946	30.0936	32.6226	49.3183
7	36.8618	24.3451	27.236	32.2946	30.0936	32.6226	49.3183
$\varphi = 1.2:$							
1	37.8086	24.3437	27.2823	32.2782	30.0507	32.58	49.3082
2	36.8748	24.6189	27.247	32.2803	30.0643	32.5891	49.3166
3	36.8457	24.4031	27.5791	32.2967	29.9644	32.4773	49.3004
5	36.893	24.4877	27.3812	32.2149	31.2943	32.3581	49.3381
6	36.1335	23.9388	26.7679	31.6831	29.2455	33.0837	48.9745
7	36.8258	24.3117	27.2037	32.2296	30.0071	32.5203	50.4241
$\varphi = 1.4:$							
1	38.6119	24.3424	27.3216	32.2643	30.0142	32.5439	49.2996
2	36.8874	24.8847	27.2577	32.2664	30.0359	32.5565	49.315
3	36.8303	24.4587	27.9082	32.2987	29.8405	32.3378	49.2832
5	36.9206	24.6134	27.5092	32.1445	32.3535	32.1248	49.3556
6	35.5506	23.6137	26.3933	31.1938	28.5668	33.4526	48.6993
7	36.7931	24.2812	27.1744	32.1705	29.9283	32.4271	51.4309
$\varphi = 1.6:$							
1	39.5396	24.341	27.3669	32.2482	29.9721	32.5021	49.2896
2	36.9003	25.1564	27.2686	32.2522	30.0068	32.5232	49.3133
3	36.8161	24.5099	28.2112	32.3005	29.7264	32.2095	49.2674
5	36.9466	24.7323	27.6303	32.078	33.3547	31.9042	49.3721
6	35.0674	23.3441	26.0827	30.7881	28.004	33.7585	48.4711
7	36.7616	24.2519	27.1462	32.1136	29.8526	32.3375	52.3988
$\varphi = 1.8:$							
1	40.6033	24.3393	27.4189	32.2297	29.9239	32.4543	49.2782
2	36.9134	25.4316	27.2796	32.2378	29.9773	32.4894	49.3116
3	36.8002	24.5672	28.5503	32.3026	29.5987	32.0659	49.2497
5	36.9695	24.8368	27.7367	32.0195	34.235	31.7103	49.3867
6	34.6723	23.1238	25.8288	30.4564	27.5439	34.0086	48.2846
7	36.734	24.2262	27.1215	32.0638	29.7863	32.2591	53.2457
$\varphi = 2.:$							
1	41.6175	24.3377	27.4685	32.2121	29.8778	32.4086	49.2673
2	36.9269	25.7172	27.2911	32.2229	29.9467	32.4544	49.3098
3	36.7858	24.6191	28.8578	32.3044	29.4829	31.9356	49.2336
5	36.9892	24.9265	27.8281	31.9693	34.9911	31.5437	49.3991
6	34.3232	22.929	25.6044	30.1633	27.1374	34.2296	48.1198
7	36.6949	24.1899	27.0864	31.9932	29.6923	32.148	54.4465

5 Reference sector: $m = 5$

This section shows results for an alternative selection of the reference sector m . In the results below, $m = 5$. Figure 10 shows the initial wage-profit curve. Figure 11 shows the wage-profit curves for technical changes in all sectors except the reference sector, $j = 1, \dots, 4, 6, 7$, at different values of φ . For ease of comparison, initial profitability indicators are: $r_m = 0.1685$, $r = 0.111865$, $\bar{r} = 0.148386$. In Figure 11 $\varphi = 1, 1.2, 1.4, 1.6, 1.8, 2$, as noted at the top of each diagram. Table 20 shows changes in aggregate profitability for technical changes in the sectors denoted by the column labels at different values of φ : the results are consistent with those reported in the paper. Tables 21 and 22 respectively show post-technical change prices p^{*w} and labour values v^* , with the sector j in which technical change takes place noted by the label for each row or prices and values.

Figure 10: Initial wage-profit (ω_m-r_m) curve, $m = 5$

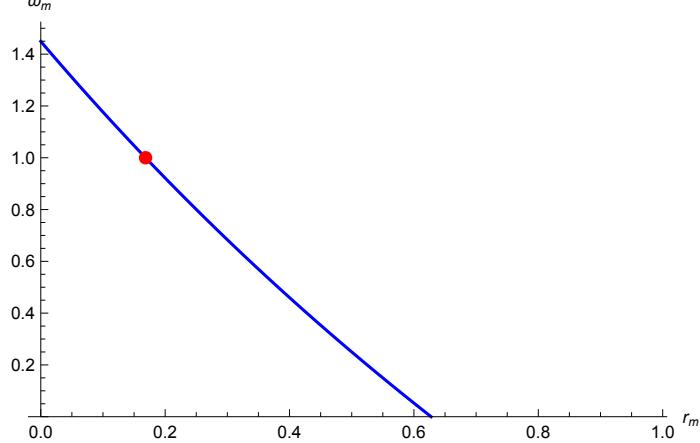
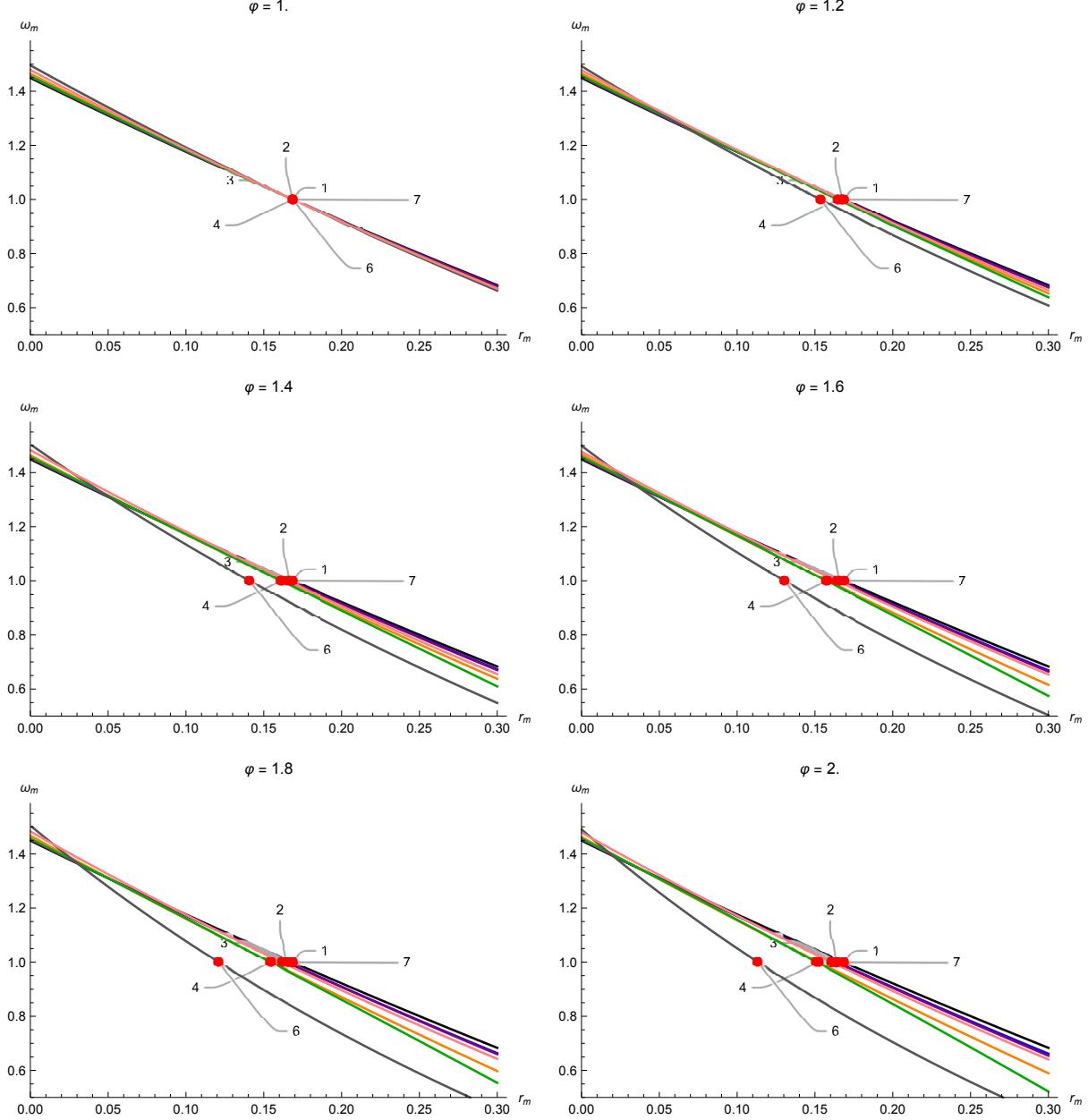


Figure 11: Wage-profit ($\omega_m - r_m$) curves for incremental changes in φ , $m = 5$



Note: The range of the vertical axis in each diagram is restricted to the range 0.5 to 1.5 to provide a clear picture of the effects of technical changes.

Table 20: Profitability after technical changes for incremental changes in φ , $m = 5$

	(1) Agrc.	(2) Mfg.	(3) Oth.Mfg.	(4) Cstrt.	(6) Cns.Svcs.	(7) Soc.Svcs.
$\varphi = 1.:$						
r_m	0.1685	0.1685	0.1685	0.1685	0.1685	0.1685
r	0.1145	0.1117	0.1117	0.1149	0.1139	0.1306
\bar{r}	0.1502	0.1485	0.1487	0.1553	0.1492	0.1651
$\varphi = 1.2:$						
r_m	0.1676	0.1675	0.1649	0.1646	0.1535	0.1669
r	0.1173	0.1119	0.1106	0.1179	0.1099	0.1346
\bar{r}	0.151	0.1491	0.1472	0.1715	0.1399	0.1682
$\varphi = 1.4:$						
r_m	0.1667	0.1665	0.1615	0.1608	0.1408	0.1649
r	0.1207	0.1121	0.1093	0.1196	0.1083	0.1436
\bar{r}	0.1521	0.1498	0.1455	0.1844	0.1334	0.1754
$\varphi = 1.6:$						
r_m	0.1658	0.1654	0.1578	0.1569	0.1302	0.1638
r	0.124	0.1125	0.1085	0.122	0.1058	0.1423
\bar{r}	0.1532	0.1508	0.1445	0.1984	0.1274	0.1739
$\varphi = 1.8:$						
r_m	0.1647	0.1645	0.1546	0.154	0.1209	0.1616
r	0.1293	0.1127	0.1074	0.1222	0.104	0.1522
\bar{r}	0.1551	0.1513	0.143	0.2025	0.1218	0.1817
$\varphi = 2.:$						
r_m	0.164	0.1635	0.1524	0.1508	0.1134	0.1605
r	0.13	0.1129	0.1062	0.1235	0.1012	0.152
\bar{r}	0.1551	0.1519	0.1414	0.2117	0.1168	0.181

Table 21: Prices p^{*w} after technical changes for incremental changes in φ , $m = 5$

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Agrc.	Mfg.	Oth.Mfg.	Cstrt.	Bus.Svcs.	Cns.Svcs.	Soc.Svcs.
$\varphi = 1.:$							
1	37.469	24.7461	27.6846	32.8266	30.5893	33.16	50.1307
2	37.469	24.7461	27.6846	32.8266	30.5893	33.16	50.1307
3	37.469	24.7461	27.6846	32.8266	30.5893	33.16	50.1307
4	37.469	24.7461	27.6846	32.8266	30.5893	33.16	50.1307
6	37.469	24.7461	27.6846	32.8266	30.5893	33.16	50.1307
7	37.469	24.7461	27.6846	32.8266	30.5893	33.16	50.1307
$\varphi = 1.2:$							
1	38.4111	24.7447	27.7307	32.8102	30.5466	33.1176	50.1206
2	37.482	25.02	27.6956	32.8123	30.56	33.1264	50.129
3	37.4524	24.8061	28.0395	32.8287	30.4557	33.0096	50.1121
4	37.4865	24.7555	27.6991	33.7998	30.5569	33.1459	50.1557
6	36.736	24.3373	27.2135	32.2112	29.7358	33.6239	49.7846
7	37.4308	24.7106	27.6504	32.7576	30.4975	33.0513	51.3044
$\varphi = 1.4:$							
1	39.3293	24.7432	27.7756	32.7943	30.5049	33.0762	50.1107
2	37.4951	25.2972	27.7067	32.7978	30.5303	33.0924	50.1272
3	37.4371	24.861	28.3644	32.8307	30.3333	32.872	50.0952
4	37.5038	24.7647	27.7132	34.7547	30.525	33.1321	50.1802
6	36.1304	23.9994	26.8243	31.7027	29.0305	34.0073	49.4987
7	37.3844	24.6675	27.6088	32.6738	30.386	32.9195	52.729
$\varphi = 1.6:$							
1	40.2411	24.7418	27.8201	32.7784	30.4635	33.0352	50.1009
2	37.5084	25.5762	27.7179	32.7832	30.5004	33.0582	50.1255
3	37.4197	24.9237	28.7354	32.8329	30.1936	32.7148	50.0758
4	37.5223	24.7746	27.7285	35.7811	30.4908	33.1173	50.2065
6	35.6431	23.7276	26.5111	31.2936	28.463	34.3157	49.2686
7	37.3584	24.6433	27.5855	32.6269	30.3234	32.8455	53.5283
$\varphi = 1.8:$							
1	41.3535	24.7401	27.8745	32.7591	30.4131	32.9852	50.089
2	37.5204	25.8298	27.7281	32.7699	30.4733	33.0271	50.1239
3	37.4049	24.9771	29.0518	32.8348	30.0744	32.5808	50.0593
4	37.5364	24.7822	27.7401	36.5669	30.4646	33.1059	50.2267
6	35.2216	23.4925	26.2402	30.9398	27.9722	34.5825	49.0696
7	37.3051	24.5937	27.5377	32.5305	30.1952	32.6938	55.1674
$\varphi = 2.:$							
1	42.0062	24.7391	27.9064	32.7478	30.3834	32.9558	50.082
2	37.5338	26.1135	27.7395	32.7551	30.4429	32.9923	50.1221
3	37.3947	25.0138	29.2692	32.8361	29.9926	32.4887	50.0479
4	37.5525	24.7908	27.7534	37.4573	30.4349	33.0931	50.2495
6	34.8904	23.3077	26.0274	30.6617	27.5866	34.7922	48.9133
7	37.281	24.5712	27.5161	32.487	30.1372	32.6252	55.9083

Table 22: Labour values v^* after technical changes for incremental changes in φ , $m = 5$

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Agrc.	Mfg.	Oth.Mfg.	Cstrt.	Bus.Svcs.	Cns.Svcs.	Soc.Svcs.
$\varphi = 1.:$							
1	37.469	24.7461	27.6846	32.8266	30.5893	33.16	50.1307
2	37.469	24.7461	27.6846	32.8266	30.5893	33.16	50.1307
3	37.469	24.7461	27.6846	32.8266	30.5893	33.16	50.1307
4	37.469	24.7461	27.6846	32.8266	30.5893	33.16	50.1307
6	37.469	24.7461	27.6846	32.8266	30.5893	33.16	50.1307
7	37.469	24.7461	27.6846	32.8266	30.5893	33.16	50.1307
$\varphi = 1.2:$							
1	38.4111	24.7447	27.7307	32.8102	30.5466	33.1176	50.1206
2	37.482	25.02	27.6956	32.8123	30.56	33.1264	50.129
3	37.4524	24.8061	28.0395	32.8287	30.4557	33.0096	50.1121
4	37.4865	24.7555	27.6991	33.7998	30.5569	33.1459	50.1557
6	36.736	24.3373	27.2135	32.2112	29.7358	33.6239	49.7846
7	37.4308	24.7106	27.6504	32.7576	30.4975	33.0513	51.3044
$\varphi = 1.4:$							
1	39.3293	24.7432	27.7756	32.7943	30.5049	33.0762	50.1107
2	37.4951	25.2972	27.7067	32.7978	30.5303	33.0924	50.1272
3	37.4371	24.861	28.3644	32.8307	30.3333	32.872	50.0952
4	37.5038	24.7647	27.7132	34.7547	30.525	33.1321	50.1802
6	36.1304	23.9994	26.8243	31.7027	29.0305	34.0073	49.4987
7	37.3844	24.6675	27.6088	32.6738	30.386	32.9195	52.729
$\varphi = 1.6:$							
1	40.2411	24.7418	27.8201	32.7784	30.4635	33.0352	50.1009
2	37.5084	25.5762	27.7179	32.7832	30.5004	33.0582	50.1255
3	37.4197	24.9237	28.7354	32.8329	30.1936	32.7148	50.0758
4	37.5223	24.7746	27.7285	35.7811	30.4908	33.1173	50.2065
6	35.6431	23.7276	26.5111	31.2936	28.463	34.3157	49.2686
7	37.3584	24.6433	27.5855	32.6269	30.3234	32.8455	53.5283
$\varphi = 1.8:$							
1	41.3535	24.7401	27.8745	32.7591	30.4131	32.9852	50.089
2	37.5204	25.8298	27.7281	32.7699	30.4733	33.0271	50.1239
3	37.4049	24.9771	29.0518	32.8348	30.0744	32.5808	50.0593
4	37.5364	24.7822	27.7401	36.5669	30.4646	33.1059	50.2267
6	35.2216	23.4925	26.2402	30.9398	27.9722	34.5825	49.0696
7	37.3051	24.5937	27.5377	32.5305	30.1952	32.6938	55.1674
$\varphi = 2.:$							
1	42.0062	24.7391	27.9064	32.7478	30.3834	32.9558	50.082
2	37.5338	26.1135	27.7395	32.7551	30.4429	32.9923	50.1221
3	37.3947	25.0138	29.2692	32.8361	29.9926	32.4887	50.0479
4	37.5525	24.7908	27.7534	37.4573	30.4349	33.0931	50.2495
6	34.8904	23.3077	26.0274	30.6617	27.5866	34.7922	48.9133
7	37.281	24.5712	27.5161	32.487	30.1372	32.6252	55.9083

6 Reference sector: $m = 6$

This section shows results for an alternative selection of the reference sector m . In the results below, $m = 6$. Figure 12 shows the initial wage-profit curve. Figure 13 shows the wage-profit curves for technical changes in all sectors except the reference sector, $j = 1, \dots, 5, 7$, at different values of φ . For ease of comparison, initial profitability indicators are: $r_m = 0.1732$, $r = 0.111865$, $\bar{r} = 0.148386$. In Figure 13 $\varphi = 1, 1.2, 1.4, 1.6, 1.8, 2$, as noted at the top of each diagram. Table 23 shows changes in aggregate profitability for technical changes in the sectors denoted by the column labels at different values of φ : the results are consistent with those reported in the paper. Tables 24 and 25 respectively show post-technical change prices p^{*w} and labour values v^* , with the sector j in which technical change takes place noted by the label for each row or prices and values.

Figure 12: Initial wage-profit (ω_m-r_m) curve, $m = 6$

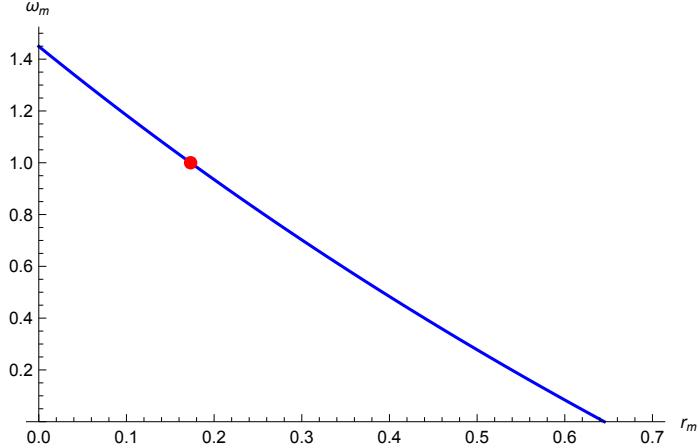


Figure 13: Wage-profit (ω_m - r_m) curves for incremental changes in φ , $m = 6$

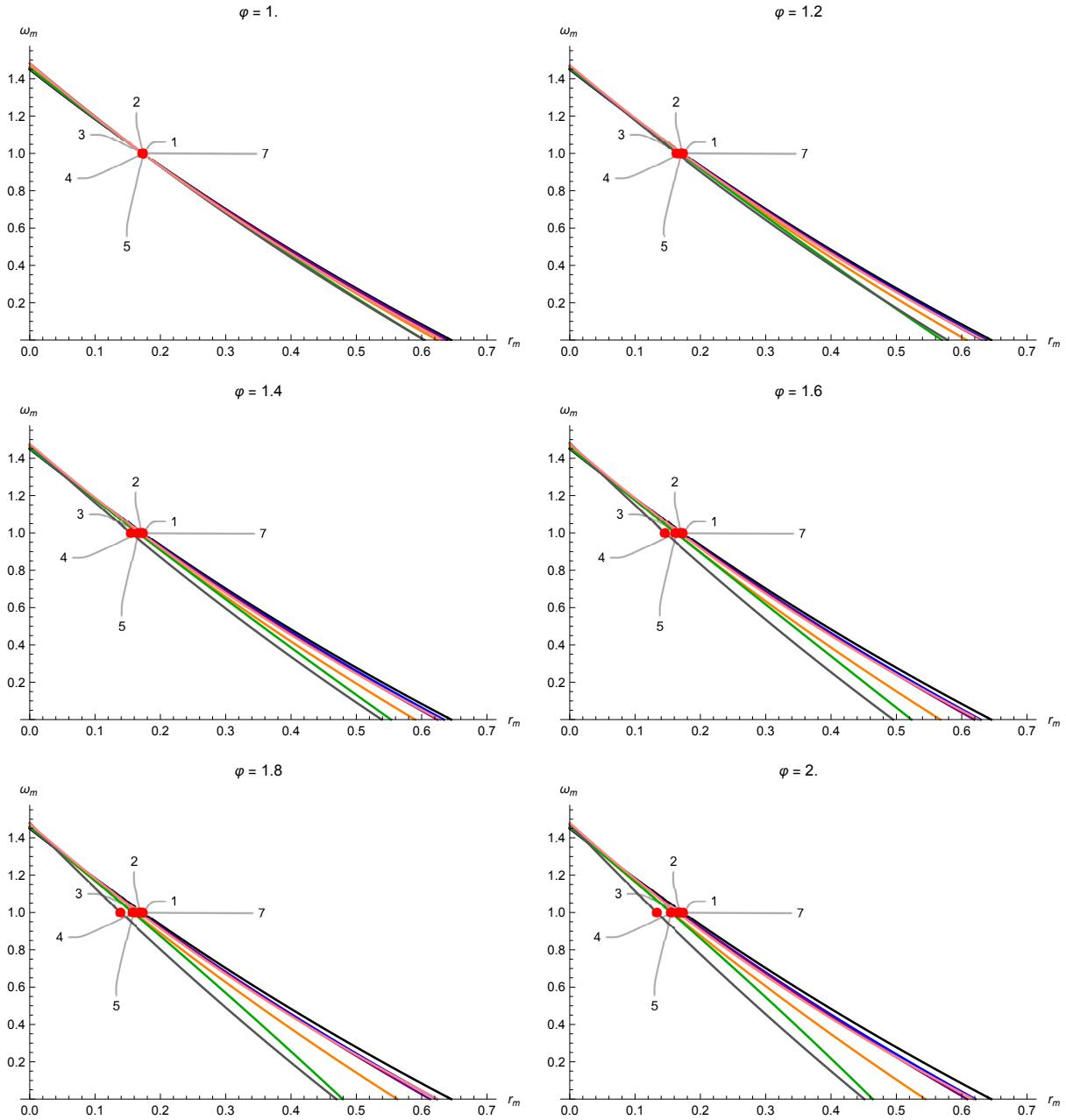


Table 23: Profitability after technical changes for incremental changes in φ , $m = 6$

	(1) Agrc.	(2) Mfg.	(3) Oth.Mfg.	(4) Cstrt.	(5) Bus.Svcs.	(7) Soc.Svcs.
$\varphi = 1.:$						
r_m	0.1732	0.1732	0.1732	0.1732	0.1732	0.1732
r	0.1152	0.1117	0.1116	0.1158	0.1145	0.1329
\bar{r}	0.1505	0.1485	0.1486	0.1586	0.1502	0.1671
$\varphi = 1.2:$						
r_m	0.1723	0.1722	0.1695	0.1692	0.1636	0.1718
r	0.117	0.1119	0.1104	0.1175	0.1116	0.1299
\bar{r}	0.1508	0.1492	0.147	0.1711	0.1451	0.1641
$\varphi = 1.4:$						
r_m	0.1714	0.1711	0.166	0.1659	0.1548	0.17
r	0.1195	0.1121	0.1094	0.1174	0.111	0.1379
\bar{r}	0.1516	0.15	0.1457	0.1746	0.1426	0.1704
$\varphi = 1.6:$						
r_m	0.1703	0.1701	0.162	0.1623	0.1462	0.1686
r	0.1242	0.1124	0.1085	0.1192	0.1108	0.141
\bar{r}	0.1533	0.1506	0.1445	0.1852	0.1399	0.1728
$\varphi = 1.8:$						
r_m	0.1692	0.169	0.1595	0.1577	0.1392	0.1673
r	0.1304	0.1128	0.1071	0.1234	0.1096	0.143
\bar{r}	0.1556	0.1515	0.1427	0.2087	0.1369	0.1739
$\varphi = 2.:$						
r_m	0.1684	0.1681	0.1561	0.1548	0.1333	0.1649
r	0.1326	0.1128	0.1063	0.1238	0.108	0.1528
\bar{r}	0.1562	0.1518	0.1416	0.2137	0.1342	0.182

Table 24: Prices p^{*w} after technical changes for incremental changes in φ , $m = 6$

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Agrc.	Mfg.	Oth.Mfg.	Cstrt.	Bus.Svcs.	Cns.Svcs.	Soc.Svcs.
$\varphi = 1.:$							
1	49.0421	32.3895	36.2356	42.9658	40.0375	43.4021	65.6147
2	49.0421	32.3895	36.2356	42.9658	40.0375	43.4021	65.6147
3	49.0421	32.3895	36.2356	42.9658	40.0375	43.4021	65.6147
4	49.0421	32.3895	36.2356	42.9658	40.0375	43.4021	65.6147
5	49.0421	32.3895	36.2356	42.9658	40.0375	43.4021	65.6147
7	49.0421	32.3895	36.2356	42.9658	40.0375	43.4021	65.6147
$\varphi = 1.2:$							
1	50.2634	32.3876	36.2953	42.9446	39.9821	43.3472	65.6016
2	49.059	32.7462	36.2499	42.9471	39.9993	43.3584	65.6124
3	49.0208	32.4663	36.6903	42.9685	39.8663	43.2095	65.5909
4	49.0647	32.4016	36.2542	44.2173	39.9958	43.3841	65.6468
5	49.0823	32.5731	36.4226	42.863	41.5841	43.0615	65.6402
7	48.9993	32.3497	36.1972	42.8884	39.9345	43.2803	66.9314
$\varphi = 1.4:$							
1	51.4283	32.3858	36.3523	42.9244	39.9292	43.2948	65.5891
2	49.0773	33.1306	36.2654	42.927	39.9582	43.3113	65.61
3	49	32.5412	37.1334	42.9712	39.6994	43.0218	65.5678
4	49.084	32.4119	36.2701	45.2895	39.96	43.3686	65.6743
5	49.1195	32.7428	36.5954	42.7681	43.0131	42.7467	65.6637
7	48.945	32.2992	36.1486	42.7903	39.8039	43.1259	68.5998
$\varphi = 1.6:$							
1	52.7606	32.3837	36.4174	42.9012	39.8688	43.2348	65.5748
2	49.0937	33.4775	36.2793	42.9089	39.921	43.2688	65.6079
3	48.9766	32.6255	37.6322	42.9742	39.5115	42.8105	65.5417
4	49.1055	32.4234	36.2878	46.4809	39.9203	43.3514	65.7049
5	49.156	32.9096	36.7652	42.6748	44.418	42.4372	65.6869
7	48.9021	32.2592	36.1101	42.7128	39.7007	43.0038	69.9187
$\varphi = 1.8:$							
1	54.2857	32.3813	36.492	42.8748	39.7996	43.1662	65.5584
2	49.1111	33.8433	36.294	42.8898	39.8819	43.2239	65.6056
3	48.962	32.678	37.9434	42.9761	39.3943	42.6787	65.5255
4	49.134	32.4387	36.3113	48.0621	39.8676	43.3285	65.7455
5	49.186	33.0463	36.9045	42.5982	45.57	42.1834	65.7059
7	48.8634	32.2233	36.0755	42.643	39.6078	42.8939	71.1055
$\varphi = 2.:$							
1	55.2848	32.3798	36.5408	42.8574	39.7542	43.1212	65.5477
2	49.1258	34.1538	36.3065	42.8736	39.8486	43.1859	65.6037
3	48.9414	32.7524	38.3834	42.9787	39.2286	42.4923	65.5025
4	49.1523	32.4484	36.3264	49.0762	39.8338	43.3139	65.7715
5	49.2112	33.1614	37.0218	42.5338	46.5399	41.9697	65.7219
7	48.7942	32.1589	36.0134	42.5179	39.4413	42.697	73.2339

Table 25: Labour values v^* after technical changes for incremental changes in φ , $m = 6$

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Agrc.	Mfg.	Oth.Mfg.	Cstrt.	Bus.Svcs.	Cns.Svcs.	Soc.Svcs.
$\varphi = 1.:$							
1	49.0421	32.3895	36.2356	42.9658	40.0375	43.4021	65.6147
2	49.0421	32.3895	36.2356	42.9658	40.0375	43.4021	65.6147
3	49.0421	32.3895	36.2356	42.9658	40.0375	43.4021	65.6147
4	49.0421	32.3895	36.2356	42.9658	40.0375	43.4021	65.6147
5	49.0421	32.3895	36.2356	42.9658	40.0375	43.4021	65.6147
7	49.0421	32.3895	36.2356	42.9658	40.0375	43.4021	65.6147
$\varphi = 1.2:$							
1	50.2634	32.3876	36.2953	42.9446	39.9821	43.3472	65.6016
2	49.059	32.7462	36.2499	42.9471	39.9993	43.3584	65.6124
3	49.0208	32.4663	36.6903	42.9685	39.8663	43.2095	65.5909
4	49.0647	32.4016	36.2542	44.2173	39.9958	43.3841	65.6468
5	49.0823	32.5731	36.4226	42.863	41.5841	43.0615	65.6402
7	48.9993	32.3497	36.1972	42.8884	39.9345	43.2803	66.9314
$\varphi = 1.4:$							
1	51.4283	32.3858	36.3523	42.9244	39.9292	43.2948	65.5891
2	49.0773	33.1306	36.2654	42.927	39.9582	43.3113	65.61
3	49	32.5412	37.1334	42.9712	39.6994	43.0218	65.5678
4	49.084	32.4119	36.2701	45.2895	39.96	43.3686	65.6743
5	49.1195	32.7428	36.5954	42.7681	43.0131	42.7467	65.6637
7	48.945	32.2992	36.1486	42.7903	39.8039	43.1259	68.5998
$\varphi = 1.6:$							
1	52.7606	32.3837	36.4174	42.9012	39.8688	43.2348	65.5748
2	49.0937	33.4775	36.2793	42.9089	39.921	43.2688	65.6079
3	48.9766	32.6255	37.6322	42.9742	39.5115	42.8105	65.5417
4	49.1055	32.4234	36.2878	46.4809	39.9203	43.3514	65.7049
5	49.156	32.9096	36.7652	42.6748	44.418	42.4372	65.6869
7	48.9021	32.2592	36.1101	42.7128	39.7007	43.0038	69.9187
$\varphi = 1.8:$							
1	54.2857	32.3813	36.492	42.8748	39.7996	43.1662	65.5584
2	49.1111	33.8433	36.294	42.8898	39.8819	43.2239	65.6056
3	48.962	32.678	37.9434	42.9761	39.3943	42.6787	65.5255
4	49.134	32.4387	36.3113	48.0621	39.8676	43.3285	65.7455
5	49.186	33.0463	36.9045	42.5982	45.57	42.1834	65.7059
7	48.8634	32.2233	36.0755	42.643	39.6078	42.8939	71.1055
$\varphi = 2.:$							
1	55.2848	32.3798	36.5408	42.8574	39.7542	43.1212	65.5477
2	49.1258	34.1538	36.3065	42.8736	39.8486	43.1859	65.6037
3	48.9414	32.7524	38.3834	42.9787	39.2286	42.4923	65.5025
4	49.1523	32.4484	36.3264	49.0762	39.8338	43.3139	65.7715
5	49.2112	33.1614	37.0218	42.5338	46.5399	41.9697	65.7219
7	48.7942	32.1589	36.0134	42.5179	39.4413	42.697	73.2339

7 Reference sector: $m = 7$

This section shows results for an alternative selection of the reference sector m . In the results below, $m = 7$. Figure 14 shows the initial wage-profit curve. Figure 15 shows the wage-profit curves for technical changes in all sectors except the reference sector, $j = 1, \dots, 6$, at different values of φ . For ease of comparison, initial profitability indicators are: $r_m = 0.0523$, $r = 0.111865$, $\bar{r} = 0.148386$. In Figure 15 $\varphi = 1, 1.2, 1.4, 1.6, 1.8, 2$, as noted at the top of each diagram. Table 26 shows changes in aggregate profitability for technical changes in the sectors denoted by the column labels at different values of φ : the results are consistent with those reported in the paper. Tables 27 and 28 respectively show post-technical change prices p^{*w} and labour values v^* , with the sector j in which technical change takes place noted by the label for each row or prices and values.

Figure 14: Initial wage-profit (ω_m-r_m) curve, $m = 7$

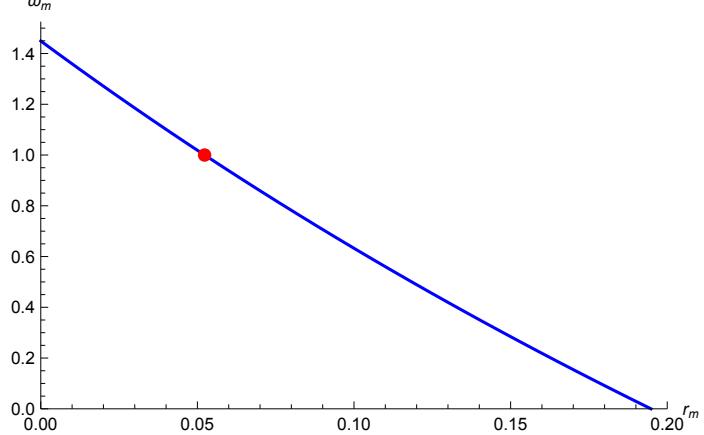


Figure 15: Wage-profit (ω_m - r_m) curves for incremental changes in φ , $m = 7$

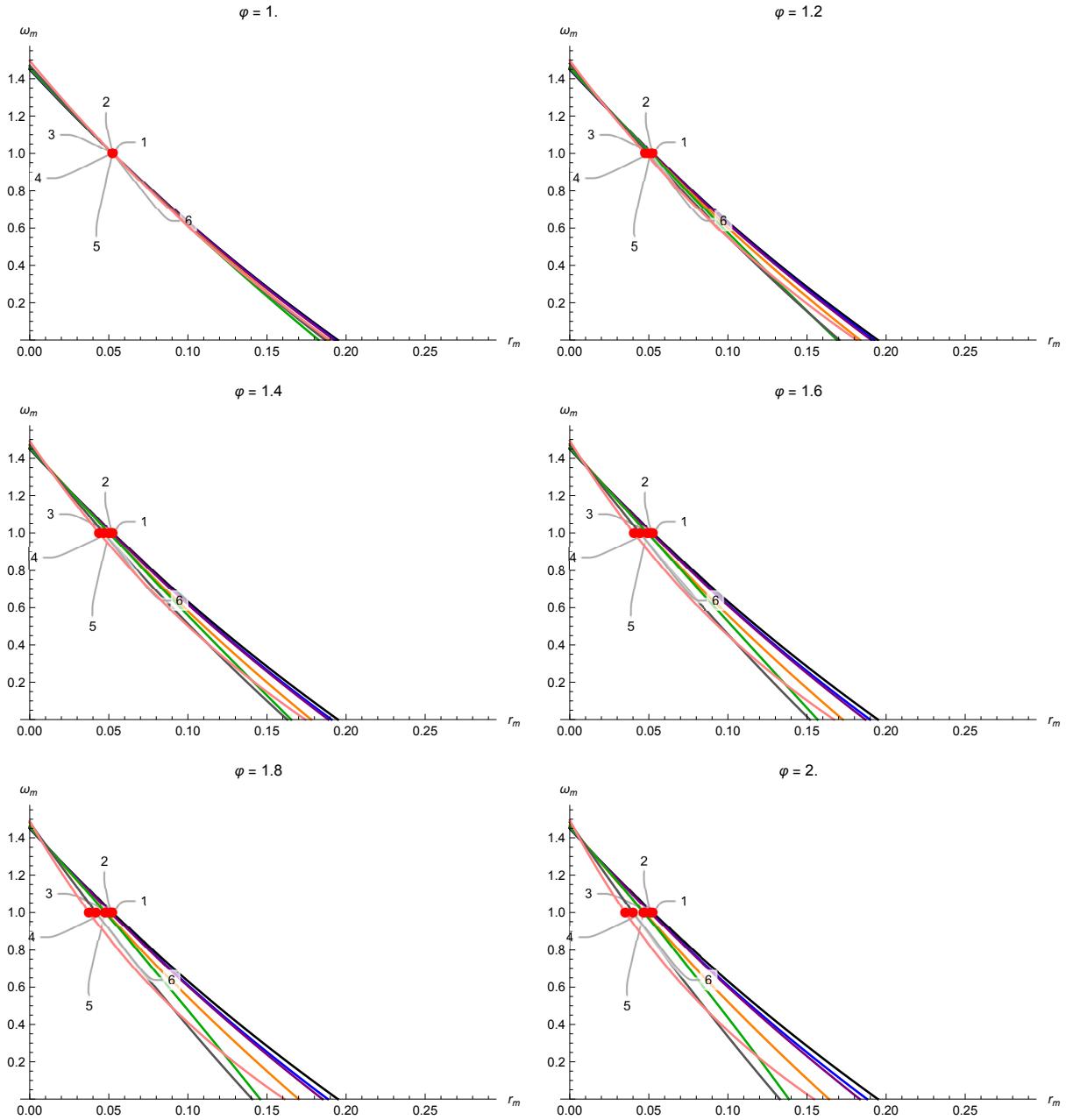


Table 26: Profitability after technical changes for incremental changes in φ , $m = 7$

	(1) Agrc.	(2) Mfg.	(3) Oth.Mfg.	(4) Cstrt.	(5) Bus.Svcs.	(6) Cns.Svcs.
$\varphi = 1.:$						
r_m	0.0523	0.0523	0.0523	0.0523	0.0523	0.0523
r	0.1139	0.1116	0.1115	0.1157	0.113	0.1135
\bar{r}	0.1499	0.1484	0.1485	0.159	0.1489	0.1488
$\varphi = 1.2:$						
r_m	0.05202	0.05199	0.05121	0.05104	0.04928	0.04764
r	0.1161	0.1119	0.1105	0.1187	0.113	0.1106
\bar{r}	0.1505	0.1492	0.1471	0.1749	0.1463	0.1405
$\varphi = 1.4:$						
r_m	0.0517	0.05167	0.0501	0.05004	0.04674	0.04378
r	0.1224	0.1123	0.1093	0.1181	0.1108	0.1073
\bar{r}	0.1529	0.1501	0.1456	0.1767	0.1422	0.1329
$\varphi = 1.6:$						
r_m	0.05142	0.05135	0.04904	0.04895	0.0443	0.04046
r	0.1247	0.1123	0.1085	0.12	0.1101	0.1051
\bar{r}	0.1535	0.1505	0.1444	0.1906	0.1394	0.1266
$\varphi = 1.8:$						
r_m	0.05111	0.05104	0.0482	0.04769	0.04194	0.03765
r	0.1298	0.1128	0.1071	0.1229	0.1097	0.1029
\bar{r}	0.1554	0.1515	0.1426	0.2064	0.1369	0.1213
$\varphi = 2.:$						
r_m	0.05091	0.05073	0.04708	0.04661	0.03993	0.03516
r	0.1311	0.1129	0.1063	0.1247	0.1093	0.1016
\bar{r}	0.1556	0.1519	0.1415	0.2165	0.1352	0.1172

Table 27: Prices p^{*w} after technical changes for incremental changes in φ , $m = 7$

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Agrc.	Mfg.	Oth.Mfg.	Cstrt.	Bus.Svcs.	Cns.Svcs.	Soc.Svcs.
$\varphi = 1.:$							
1	20.0593	13.248	14.8211	17.5739	16.3762	17.7524	26.8378
2	20.0593	13.248	14.8211	17.5739	16.3762	17.7524	26.8378
3	20.0593	13.248	14.8211	17.5739	16.3762	17.7524	26.8378
4	20.0593	13.248	14.8211	17.5739	16.3762	17.7524	26.8378
5	20.0593	13.248	14.8211	17.5739	16.3762	17.7524	26.8378
6	20.0593	13.248	14.8211	17.5739	16.3762	17.7524	26.8378
$\varphi = 1.2:$							
1	20.5478	13.2473	14.845	17.5655	16.354	17.7304	26.8326
2	20.0663	13.3953	14.8271	17.5662	16.3604	17.7344	26.8369
3	20.0507	13.279	15.0046	17.575	16.3071	17.6747	26.8282
4	20.069	13.2532	14.8291	18.1123	16.3583	17.7446	26.8516
5	20.0764	13.3262	14.9008	17.5302	17.0348	17.6073	26.8487
6	19.6654	13.0283	14.568	17.2432	15.9175	18.0017	26.6518
$\varphi = 1.4:$							
1	21.1114	13.2464	14.8726	17.5557	16.3285	17.7051	26.8265
2	20.0733	13.5437	14.833	17.5585	16.3446	17.7162	26.836
3	20.0419	13.3106	15.1916	17.5762	16.2367	17.5955	26.8185
4	20.0769	13.2575	14.8357	18.5528	16.3436	17.7383	26.8629
5	20.0909	13.3923	14.968	17.4932	17.5912	17.4848	26.8578
6	19.3498	12.8522	14.3652	16.9783	15.55	18.2015	26.5028
$\varphi = 1.6:$							
1	21.6051	13.2456	14.8967	17.5471	16.3061	17.6829	26.8212
2	20.0805	13.695	14.8391	17.5506	16.3283	17.6976	26.835
3	20.0335	13.3411	15.372	17.5773	16.1687	17.519	26.809
4	20.0858	13.2622	14.843	19.0468	16.3271	17.7311	26.8756
5	20.105	13.4565	15.0335	17.4572	18.1328	17.3655	26.8668
6	19.0853	12.7047	14.1952	16.7563	15.242	18.3689	26.378
$\varphi = 1.8:$							
1	22.1433	13.2448	14.923	17.5378	16.2816	17.6586	26.8154
2	20.0874	13.8405	14.8449	17.543	16.3128	17.6798	26.8341
3	20.0267	13.3653	15.5151	17.5781	16.1148	17.4584	26.8016
4	20.0963	13.2678	14.8516	19.627	16.3077	17.7228	26.8905
5	20.1186	13.5189	15.097	17.4223	18.658	17.2498	26.8754
6	18.8671	12.583	14.0549	16.573	14.9879	18.5071	26.2749
$\varphi = 2.:$							
1	22.5097	13.2442	14.941	17.5314	16.265	17.6422	26.8115
2	20.0943	13.9856	14.8508	17.5354	16.2972	17.662	26.8332
3	20.0177	13.3978	15.7077	17.5793	16.0423	17.3768	26.7915
4	20.1056	13.2728	14.8593	20.1436	16.2905	17.7153	26.9038
5	20.1303	13.5725	15.1516	17.3923	19.1095	17.1503	26.8829
6	18.6765	12.4767	13.9324	16.413	14.766	18.6277	26.185

Table 28: Labour values v^* after technical changes for incremental changes in φ , $m = 7$

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Agrc.	Mfg.	Oth.Mfg.	Cstrt.	Bus.Svcs.	Cns.Svcs.	Soc.Svcs.
$\varphi = 1.:$							
1	20.0593	13.248	14.8211	17.5739	16.3762	17.7524	26.8378
2	20.0593	13.248	14.8211	17.5739	16.3762	17.7524	26.8378
3	20.0593	13.248	14.8211	17.5739	16.3762	17.7524	26.8378
4	20.0593	13.248	14.8211	17.5739	16.3762	17.7524	26.8378
5	20.0593	13.248	14.8211	17.5739	16.3762	17.7524	26.8378
6	20.0593	13.248	14.8211	17.5739	16.3762	17.7524	26.8378
$\varphi = 1.2:$							
1	20.5478	13.2473	14.845	17.5655	16.354	17.7304	26.8326
2	20.0663	13.3953	14.8271	17.5662	16.3604	17.7344	26.8369
3	20.0507	13.279	15.0046	17.575	16.3071	17.6747	26.8282
4	20.069	13.2532	14.8291	18.1123	16.3583	17.7446	26.8516
5	20.0764	13.3262	14.9008	17.5302	17.0348	17.6073	26.8487
6	19.6654	13.0283	14.568	17.2432	15.9175	18.0017	26.6518
$\varphi = 1.4:$							
1	21.1114	13.2464	14.8726	17.5557	16.3285	17.7051	26.8265
2	20.0733	13.5437	14.833	17.5585	16.3446	17.7162	26.836
3	20.0419	13.3106	15.1916	17.5762	16.2367	17.5955	26.8185
4	20.0769	13.2575	14.8357	18.5528	16.3436	17.7383	26.8629
5	20.0909	13.3923	14.968	17.4932	17.5912	17.4848	26.8578
6	19.3498	12.8522	14.3652	16.9783	15.55	18.2015	26.5028
$\varphi = 1.6:$							
1	21.6051	13.2456	14.8967	17.5471	16.3061	17.6829	26.8212
2	20.0805	13.695	14.8391	17.5506	16.3283	17.6976	26.835
3	20.0335	13.3411	15.372	17.5773	16.1687	17.519	26.809
4	20.0858	13.2622	14.843	19.0468	16.3271	17.7311	26.8756
5	20.105	13.4565	15.0335	17.4572	18.1328	17.3655	26.8668
6	19.0853	12.7047	14.1952	16.7563	15.242	18.3689	26.378
$\varphi = 1.8:$							
1	22.1433	13.2448	14.923	17.5378	16.2816	17.6586	26.8154
2	20.0874	13.8405	14.8449	17.543	16.3128	17.6798	26.8341
3	20.0267	13.3653	15.5151	17.5781	16.1148	17.4584	26.8016
4	20.0963	13.2678	14.8516	19.627	16.3077	17.7228	26.8905
5	20.1186	13.5189	15.097	17.4223	18.658	17.2498	26.8754
6	18.8671	12.583	14.0549	16.573	14.9879	18.5071	26.2749
$\varphi = 2.:$							
1	22.5097	13.2442	14.941	17.5314	16.265	17.6422	26.8115
2	20.0943	13.9856	14.8508	17.5354	16.2972	17.662	26.8332
3	20.0177	13.3978	15.7077	17.5793	16.0423	17.3768	26.7915
4	20.1056	13.2728	14.8593	20.1436	16.2905	17.7153	26.9038
5	20.1303	13.5725	15.1516	17.3923	19.1095	17.1503	26.8829
6	18.6765	12.4767	13.9324	16.413	14.766	18.6277	26.185