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Further Data on County Incomes
in the Sixties

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FURTHER DATA ON COUNTY INCOMES
IN THE SIXTIES

Miceal Ross

May, 1972

Further Data on County Incomes in the Sixties

Miceal Ross

ECONOMIC AND SOCIAL RESEARCH INSTITUTE, Paper No. 64.

Summary of Main Findings

The main purpose of this paper is to make available estimates of personal incomes by county for 1969. Revised estimates for the years 1960 and 1965 are also presented, thus providing a set of figures for the beginning, mid-point and end of the 'sixties.

In comparing counties' performance over the decade, attention is naturally concentrated on the level and growth of personal income *per capita* corrected for price changes. Tables 8 and 10 of the Paper provide this information, and they are reproduced in this summary.

The regional pattern of income per person at all three dates displays marked variation. In 1969, income per person varied from £551 in Dublin to £289 in Leitrim. Only five counties (other than Dublin) were above £400 (*viz.* Kildare, Louth, Cork, Limerick and Waterford), but all of Connacht and Ulster (3 counties) were below £350, together with Laois, Longford, Meath, Offaly, Westmeath and Kerry.

All counties have experienced significant growth in real income per person during the 1960's, ranging from 50 per cent in Clare to 25 per cent in Meath. It is striking that income per person grew at a fairly uniform rate in all four Provinces—ranging only from 43 per cent in Ulster (three counties) to 41 per cent in Connacht. If Dublin is excluded, Leinster grew at only 36 per cent—indeed nine of the ten counties with the lowest growth were in Leinster (*viz.* all of Leinster except Louth, Longford and Dublin). By contrast, six of the eight fastest growing counties were in the designated areas ("the West"), namely, Clare, Monaghan, Mayo, Cavan, Sligo and Longford.

For several counties, the rate of growth in income per person was not at all uniform over the decade. Wicklow, Limerick, Waterford and Cavan are notable for the slowing-down in growth that occurred after 1965, whereas Carlow, Kildare, Laois, Longford, Offaly and Galway all experienced a marked acceleration in growth after 1965. Louth, Clare and Monaghan had stable growth at or above the national average rate throughout the decade,

whereas Meath, Westmeath, Tipperary, Leitrim and Roscommon experienced stable growth at less than the national rate during the decade.

Whilst it is true that the absolute size of the gap in real personal income *per capita* between Connacht and Leinster has widened since 1965, the extent of this widening has not been great (£18 at 1969 prices), and the ratio of Connacht income *per capita* relative to that of Leinster rose from 67 to 68 per cent. The gap between Leinster (excluding Dublin) and Connacht actually narrowed by £1 (income *per capita*, 1969 prices). This progress towards redressing the regional imbalance may appear slow, but arresting the divergence is the first step in the right direction. A measure of success has been achieved in furthering well-being in the less developed areas of the country, although the deterioration in the relative position of some of the less prosperous counties is also striking.

More detailed analysis, especially of income by sector of economic activity, is contained in the paper, together with comparisons of growth between the first and second half of the decade.

TABLE A : *Per Capita Estimates of Personal Income at Current and 1969 Prices*
(£ per head)

<i>County</i>	<i>At Current Prices</i>			<i>At 1969 Prices*</i>		
	<i>1960</i>	<i>1965</i>	<i>1969</i>	<i>1960</i>	<i>1965</i>	<i>1969</i>
Carlow	186	261	376	274	313	376
Dublin	262	389	551	385	465	551
Kildare	204	285	411	300	341	411
Kilkenny	184	269	368	271	321	368
Laois	171	225	322	251	269	322
Longford	151	217	317	221	259	317
Louth	203	302	439	298	361	439
Meath	183	253	334	268	302	334
Offaly	177	240	333	260	287	333
Westmeath	173	251	344	254	300	344
Wexford	176	247	351	258	295	351
Wicklow	192	277	372	282	331	372
<i>Leinster</i>	<i>226</i>	<i>332</i>	<i>470</i>	<i>332</i>	<i>397</i>	<i>470</i>
Leinster excluding Dublin	183	260	365	269	311	365
Clare	167	251	368	246	300	368
Cork	205	305	428	301	364	428
Kerry	170	243	348	251	291	348
Limerick	195	293	402	287	351	402
Tipperary	190	276	385	279	330	385
Waterford	201	304	421	296	363	421
<i>Munster</i>	<i>193</i>	<i>286</i>	<i>402</i>	<i>283</i>	<i>342</i>	<i>402</i>
Galway	164	231	332	241	276	332
Leitrim	145	207	289	213	248	289
Mayo	146	214	314	214	256	314
Roscommon	151	218	307	222	260	307
Mayo	158	229	333	232	273	333
<i>Connacht</i>	<i>154</i>	<i>222</i>	<i>321</i>	<i>227</i>	<i>266</i>	<i>321</i>
Cavan	155	235	328	228	281	328
Donegal	149	215	306	219	257	306
Monaghan	158	233	343	232	279	343
<i>Ulster (part)</i>	<i>152</i>	<i>224</i>	<i>320</i>	<i>224</i>	<i>268</i>	<i>320</i>
TOTAL	199	295	419	293	353	419
Total excluding Dublin	178	260	368	262	311	368

*The 1960 and 1965 figures have been increased by the rise in the consumer price index between 1960, 1965 and 1969 to standardise the purchasing power of expenditure.

TABLE B : Comparison of County Performance

County	Changes in Real Per Capita Income (%)				Ranking* by Personal Per Capita Income		
	Personal Income		Income Arising		Absolute Level		Change
	1960-5	1965-9	1960-9	1960-5	1960	1969	1960-9
Carlow	14	20	37	21	9	8	17
Dublin	21	18	43	18	1	1	6
Kildare	14	21	37	15	3	5	17
Kilkenny	19	15	36	16	10	10	19
Laois	7	20	28	5	15	21	24
Longford	17	22	43	29	23	22	6
Louth	21	22	47	18	4	2	3
Meath	12	11	25	12	11	16	26
Offaly	11	16	28	17	12	17	24
Westmeath	18	15	35	17	14	14	22
Wexford	15	19	36	13	13	12	19
Wicklow	17	12	32	17	7	9	23
<i>Leinster</i>	20	18	42	18	—	—	—
Leinster excluding Dublin	16	17	36	15	—	—	—
Clare	22	23	50	32	17	11	1
Cork	21	18	42	21	2	3	9
Kerry	16	20	39	15	16	13	12
Limerick	22	15	40	22	6	6	11
Tipperary	18	17	38	17	8	7	14
Waterford	23	16	42	24	5	4	9
<i>Munster</i>	21	18	42	21	—	—	—
Galway	15	20	38	13	18	19	14
Leitrim	16	17	36	14	26	26	19
Mayo	19	23	47	20	25	23	3
Roscommon	17	18	38	16	22	24	14
Sligo	18	22	43	18	19	18	6
<i>Connacht</i>	17	20	41	16	—	—	—
Cavan	24	17	44	25	21	20	5
Donegal	18	19	39	14	24	25	12
Monaghan	20	23	48	20	19	15	2
<i>Ulster (part)</i>	20	19	43	19	—	—	—
TOTAL	20	19	43	20	—	—	—
Total excluding Dublin	19	18	40	17	—	—	—

* 1 means highest, 26 means lowest.

FURTHER DATA ON COUNTY INCOMES
IN THE SIXTIES

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Further Data on County Incomes in the Sixties

MICEAL ROSS*

PART I: COUNTY INCOMES FOR 1960, 1965 and 1969.

Introduction

The main purpose of this paper is to make available estimates of personal incomes by county for 1969—the last year for which estimates are published in the annual *National Income and Expenditure Series*. Advantage is taken of this new compilation to present revised estimates of personal income for 1960 and 1965 which update the estimates for these years published in Paper No. 49 in 1969.[1] Thus a set of up-to-date personal income figures is now available for the beginning, mid-point and end of the 'sixties. In addition, estimates of income arising in each county are presented for 1960 and 1965. These are the first such estimates for 1965, while the 1960 figures represent a major revision of the estimates made by Attwood and Geary in 1963.[2] The quality of the available data for 1969 did not warrant a similar calculation for that year.

Plan of the Paper

The paper falls into three sections. The first part presents the estimates of personal income by county for 1969, together with revised estimates for 1960 and 1965. It also includes a brief discussion of some of the more important changes in the structure of county incomes during the 'sixties. In this Part, the methodology employed in calculating the figures is mentioned only to the extent necessary to an understanding of the discussion.

The second Part discusses in some detail the methodology employed in making the calculations where this diverges significantly from the methodology used in earlier estimates.[3]

The third Part sets out the estimates of income arising in each county in 1960 and 1965, and outlines the methodology used in reaching these estimates.

For each section, the relevant Tables are grouped together at the end of that section.

*The author is a member of the staff of The Economic and Social Research Institute. The paper has been accepted for publication by the Institute. The author is responsible for the contents of the paper including the views expressed therein.

Estimates of Personal Income (Tables 1 to 6)

Tables 1, 2 and 3 present the estimates of total personal income by county for 1969 and revised estimates for 1960 and 1965. The three following tables are derived from the first three. Table 4 shows the structure of personal income within each county in 1969. This may be studied in conjunction with Tables 4 and 5 of *Personal Incomes by County 1965* [1] which present similar data for 1965 and 1960 based on the unrevised estimates. For the most part such revisions as were made subsequent to publishing the earlier study do not materially alter the general structure as presented there and new tables have not been prepared. Tables 5 and 6 present the changes in some major components of personal income between 1960 and 1965, 1965 and 1969, and for the whole period. As such they both augment and supersede the data published earlier in Table 3 of [1].

TABLE 1: *Distribution of Personal Incomes 1969 (£000's)*

County	Domestic Remuneration of Employees			Income of self-employed		Interest Dividends and Rents	Current Transfers from Public Authorities	Emigrants Re-mittances and Pensions (a)	Total
	Agriculture and Forestry	Industry	Other Sectors	Agriculture and Fisheries	Others				
Carlow	664	2,984	2,978	2,444	767	1,250	1,347	317	12,750
Dublin	1,352	133,357	181,831	5,620	26,202	69,972	33,203	5,692	457,228
Kildare	1,035	8,184	7,500	4,539	1,630	3,143	2,226	407	28,664
Kilkenny	894	4,695	4,714	6,623	1,315	1,787	2,142	425	22,596
Laois	629	3,208	3,113	3,969	862	940	1,558	224	14,503
Longford	164	1,529	1,970	2,217	611	601	1,432	496	9,021
Louth	531	12,712	7,747	2,981	1,843	2,737	2,863	630	32,043
Meath	1,481	4,970	4,680	6,139	1,372	2,136	2,278	378	23,434
Offaly	463	5,119	3,642	3,497	1,035	1,259	1,818	420	17,253
Westmeath	436	3,651	6,112	2,817	1,232	1,284	2,271	540	18,343
Wexford	1,835	4,589	7,227	7,630	1,882	2,694	3,271	724	29,850
Wicklow	1,109	5,649	5,850	2,927	1,821	3,782	2,186	593	23,914
<i>Leinster</i>	<i>10,594</i>	<i>190,646</i>	<i>237,361</i>	<i>51,403</i>	<i>40,571</i>	<i>91,583</i>	<i>56,595</i>	<i>10,847</i>	<i>689,600</i>
Clare	493	6,654	6,411	6,737	1,618	1,745	2,883	841	27,382
Cork	3,116	37,893	41,304	26,448	8,139	13,583	14,105	4,182	148,772
Kerry	1,044	6,530	8,743	11,247	2,400	2,294	5,471	1,596	39,327
Limerick	1,396	11,849	16,482	10,766	3,308	4,958	5,490	1,762	56,011
Tipperary	1,858	9,061	11,143	12,438	2,989	3,811	4,936	1,145	47,380
Waterford	1,015	8,703	8,842	5,195	1,894	2,562	2,820	755	31,784
<i>Munster</i>	<i>8,922</i>	<i>80,689</i>	<i>92,926</i>	<i>72,831</i>	<i>20,347</i>	<i>28,954</i>	<i>35,705</i>	<i>10,280</i>	<i>350,656</i>
Galway	591	6,966	14,047	11,818	3,502	3,485	6,962	1,894	49,263
Leitrim	152	867	1,963	2,498	461	455	1,643	367	8,407
Mayo	325	4,781	7,789	8,689	2,103	2,368	6,050	2,987	35,093
Roscommon	217	1,728	3,957	5,482	880	1,251	2,346	827	16,690
Sligo	245	2,948	4,811	3,854	1,114	1,116	2,095	641	16,825
<i>Connacht</i>	<i>1,531</i>	<i>17,290</i>	<i>32,568</i>	<i>32,342</i>	<i>8,060</i>	<i>8,676</i>	<i>19,097</i>	<i>6,716</i>	<i>126,278</i>
Cavan	343	2,612	3,825	5,817	1,035	1,027	2,020	742	17,420
Donegal	846	6,080	7,696	6,180	2,102	2,628	5,603	1,917	33,052
Monaghan	252	2,835	3,551	4,899	885	1,135	1,753	498	15,809
<i>Ulster (part)</i>	<i>1,441</i>	<i>11,527</i>	<i>15,073</i>	<i>16,895</i>	<i>4,022</i>	<i>4,790</i>	<i>9,376</i>	<i>3,157</i>	<i>66,281</i>
TOTAL	22,488	300,153	377,928	173,471	73,000	134,003	120,772	31,000	1,232,814

(a) Includes Foreign Remuneration of employees.

TABLE 2: *Distribution of Personal Incomes 1965 (£000's current prices)*

County	Domestic Remuneration of Employees			Income of self-employed		Interest Dividends and Rents	Current Transfers from Public Authorities	Emigrants Re-mittances and Pensions (a)	Total
	Agriculture and Forestry	Industry	Other Sectors	Agriculture and Fisheries	Others				
Carlow	566	2,090	2,093	1,625	585	837	760	215	8,769
Dublin	1,112	87,595	125,828	4,081	20,212	44,992	17,289	3,912	305,021
Kildare	983	4,658	5,328	3,016	1,259	2,118	1,231	277	18,870
Kilkenny	935	3,144	3,299	5,159	1,046	1,227	1,206	289	16,305
Laois	638	2,039	2,088	2,880	679	672	895	153	10,043
Longford	209	952	1,331	1,832	457	417	801	335	6,335
Louth	517	7,571	5,338	2,203	1,481	1,768	1,602	431	20,911
Meath	1,160	3,329	3,147	5,080	1,097	1,538	1,304	257	16,913
Offaly	443	3,738	2,499	2,699	830	880	1,053	286	12,428
Westmeath	451	2,381	4,501	2,465	943	908	1,256	366	13,273
Wexford	1,634	3,119	5,075	5,100	1,518	1,804	1,865	495	20,611
Wicklow	928	3,488	4,134	2,517	1,447	2,500	1,206	406	16,626
<i>Leinster</i>	<i>9,577</i>	<i>124,105</i>	<i>164,662</i>	<i>38,657</i>	<i>31,553</i>	<i>59,660</i>	<i>30,466</i>	<i>7,424</i>	<i>466,105</i>
Clare	436	3,311	4,161	5,848	1,296	1,198	1,653	570	18,472
Cork	2,646	23,584	28,661	22,310	6,359	8,918	7,832	2,851	103,160
Kerry	1,006	3,639	5,997	9,380	1,883	1,547	3,028	1,078	27,558
Limerick	1,297	8,057	11,321	9,359	2,549	3,269	3,061	1,195	40,107
Tipperary	1,712	5,953	7,239	10,561	2,297	2,611	2,841	778	33,992
Waterford	839	5,370	6,417	4,266	1,486	1,676	1,566	517	22,137
<i>Munster</i>	<i>7,935</i>	<i>49,914</i>	<i>63,796</i>	<i>61,724</i>	<i>15,871</i>	<i>19,217</i>	<i>19,981</i>	<i>6,989</i>	<i>245,427</i>
Galway	616	4,653	8,776	10,104	2,683	2,411	3,789	1,279	34,309
Leitrim	143	613	1,450	2,306	369	334	975	248	6,422
Mayo	293	3,160	5,067	7,735	1,633	1,671	3,395	2,025	24,977
Roscommon	226	1,173	2,421	5,013	679	914	1,362	559	12,346
Sligo	186	1,863	3,045	3,406	873	781	1,202	436	11,796
<i>Connacht</i>	<i>1,463</i>	<i>11,464</i>	<i>20,760</i>	<i>28,563</i>	<i>6,112</i>	<i>6,112</i>	<i>10,705</i>	<i>4,547</i>	<i>89,850</i>
Cavan	326	1,718	2,531	4,917	860	725	1,218	501	12,797
Donegal	773	3,941	5,095	5,771	1,768	1,750	3,102	1,302	23,503
Monaghan	226	1,711	2,322	3,603	712	791	1,006	337	10,708
<i>Ulster (part)</i>	<i>1,345</i>	<i>7,371</i>	<i>9,947</i>	<i>14,291</i>	<i>3,340</i>	<i>3,266</i>	<i>5,326</i>	<i>2,140</i>	<i>47,008</i>
TOTAL	20,300	192,854	259,166	143,236	57,000	88,256	66,478	21,100	848,390

(a) Includes Foreign Remuneration of employees.

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TABLE 3: *Distribution of Personal Incomes 1960 (£,000's current prices)*

County	Domestic Remuneration of Employees			Income of self-employed		Interest Dividends and Rents	Current Transfers from Public Authorities	Emigrants Re-mittances and Pensions (a)	Total
	Agriculture and Forestry	Industry	Other Sectors	Agriculture and Fisheries	Others				
Carlow	427	1,266	1,237	1,646	414	593	453	188	6,224
Dublin	996	51,045	76,931	2,553	13,318	29,728	9,654	3,459	187,684
Kildare	844	2,704	3,543	2,777	826	1,453	764	263	13,172
Kilkenny	783	1,938	2,069	3,999	739	896	775	236	11,435
Laois	588	1,356	1,400	2,731	497	500	560	112	7,744
Longford	189	537	943	1,581	319	303	499	296	4,665
Louth	446	4,550	3,558	1,585	1,082	1,237	907	356	13,721
Meath	1,025	1,784	2,032	4,215	719	1,104	789	267	11,935
Offaly	386	2,410	1,616	2,604	607	650	627	208	9,108
Westmeath	413	1,324	2,840	2,221	632	674	741	311	9,154
Wexford	1,327	1,812	3,157	4,419	1,120	1,294	1,166	429	14,724
Wicklow	758	2,151	2,639	1,881	975	1,715	741	388	11,248
<i>Leinster</i>	<i>8,182</i>	<i>72,877</i>	<i>101,961</i>	<i>32,212</i>	<i>21,248</i>	<i>40,148</i>	<i>17,676</i>	<i>6,511</i>	<i>300,815</i>
Clare	364	1,444	2,413	4,883	968	855	1,043	423	12,391
Cork	2,262	15,136	17,369	15,329	4,561	6,238	4,639	2,276	67,811
Kerry	779	2,220	3,701	8,034	1,390	1,150	1,830	888	19,992
Limerick	1,217	4,377	6,922	6,701	1,774	2,262	1,904	997	26,155
Tipperary	1,468	3,777	4,473	7,954	1,741	1,889	1,679	692	23,674
Waterford	632	3,105	3,716	3,233	1,070	1,213	996	472	14,436
<i>Munster</i>	<i>6,722</i>	<i>30,060</i>	<i>38,594</i>	<i>46,134</i>	<i>11,503</i>	<i>13,605</i>	<i>12,091</i>	<i>5,748</i>	<i>164,458</i>
Galway	509	2,987	5,552	8,847	1,829	1,722	2,213	1,026	24,687
Leitrim	106	441	909	2,028	300	262	575	307	4,928
Mayo	239	1,823	3,319	6,380	1,229	1,234	2,049	1,907	18,179
Roscommon	160	769	1,649	3,986	511	677	855	427	9,032
Sligo	146	1,211	1,890	2,918	652	583	784	360	8,543
<i>Connacht</i>	<i>1,160</i>	<i>7,231</i>	<i>13,318</i>	<i>24,159</i>	<i>4,521</i>	<i>4,477</i>	<i>6,476</i>	<i>4,027</i>	<i>65,369</i>
Cavan	259	1,002	1,757	3,435	677	542	799	407	8,879
Donegal	598	2,400	3,654	4,831	1,383	1,239	1,803	1,196	17,103
Monaghan	184	941	1,754	2,525	568	596	672	311	7,552
<i>Ulster (part)</i>	<i>1,042</i>	<i>4,343</i>	<i>7,165</i>	<i>10,791</i>	<i>2,628</i>	<i>2,377</i>	<i>3,275</i>	<i>1,914</i>	<i>33,535</i>
TOTAL	17,105	114,511	161,039	113,296	39,900	60,609	39,517	18,200	564,177

(a) Includes Foreign Remuneration of employees.

Agriculture (Tables 4 and 5)

The structural changes in personal income reported for the first half of the decade continued in the second half. In the State, excluding County Dublin, income from agriculture declined in importance as a source of income, falling from 34 per cent in 1960 to 29 per cent in 1965, and to 24 per cent in 1969. (Including Dublin the figures are respectively 23, 19 and 16 per cent). In 1969, as shown in Table 4, the greatest percentage of income derived from

TABLE 4: Structure of Personal Income Within Each County 1969 (Percentage Attributable to each origin)

County	Agriculture Total	Non-Agricultural Remuneration		Current Transfers	Other Income	Total
		Industry	Other			
Carlow	24.4	23.4	23.4	10.6	18.3	100.0
Dublin	1.5	29.2	39.8	7.3	22.3	100.0
Kildare	19.4	28.6	26.2	7.8	18.1	100.0
Kilkenny	33.3	20.8	20.9	9.5	15.6	100.0
Laois	31.7	22.1	21.5	10.7	14.0	100.0
Longford	26.4	16.9	21.8	15.9	18.9	100.0
Louth	11.0	39.7	24.2	8.9	16.3	100.0
Meath	32.5	21.2	20.0	9.7	16.6	100.0
Offaly	23.0	29.7	21.1	10.5	15.7	100.0
Westmeath	17.7	19.9	33.3	12.4	16.7	100.0
Wexford	31.7	15.4	24.2	11.0	17.8	100.0
Wicklow	16.9	23.6	24.5	9.1	25.9	100.0
<i>Leinster</i>	<i>9.0</i>	<i>27.6</i>	<i>34.4</i>	<i>8.2</i>	<i>20.7</i>	<i>100.0</i>
Leinster (excluding Dublin)	23.7	24.7	23.9	10.1	17.7	100.0
Clare	26.4	24.3	23.4	10.5	15.3	100.0
Cork	19.9	25.5	27.8	9.5	17.4	100.0
Kerry	31.3	16.6	22.2	13.9	16.0	100.0
Limerick	21.7	21.2	29.4	9.8	17.9	100.0
Tipperary	30.2	19.1	23.5	10.4	16.8	100.0
Waterford	19.5	27.4	27.8	8.9	16.4	100.0
<i>Munster</i>	<i>23.3</i>	<i>23.0</i>	<i>26.5</i>	<i>10.2</i>	<i>17.0</i>	<i>100.0</i>
Galway	25.2	14.1	28.5	14.1	18.0	100.0
Leitrim	31.5	10.3	23.3	19.5	15.3	100.0
Mayo	25.7	13.6	22.2	17.2	21.3	100.0
Roscommon	34.1	10.4	23.7	14.1	17.7	100.0
Sligo	24.4	17.5	28.6	12.5	17.1	100.0
<i>Connacht</i>	<i>26.8</i>	<i>13.7</i>	<i>25.8</i>	<i>15.1</i>	<i>18.6</i>	<i>100.0</i>
Cavan	35.4	15.0	22.0	11.6	16.1	100.0
Donegal	21.3	18.4	23.3	17.0	20.1	100.0
Monaghan	32.6	17.9	22.5	11.1	15.9	100.0
<i>Ulster (part)</i>	<i>27.7</i>	<i>17.4</i>	<i>22.7</i>	<i>14.1</i>	<i>18.1</i>	<i>100.0</i>
TOTAL	15.9	24.3	30.7	9.8	19.3	100.0
Total excluding Dublin	24.4	21.5	25.3	11.3	17.5	100.0

TABLE 5: *Percentage Increase in Income Derived from Agriculture and Employee Remuneration*

County	Agriculture			Employee Remuneration Outside Agriculture					
	(Total)			Industry			Other Domestic		
	1960-5	1965-9	1960-9	1960-5	1965-9	1960-9	1960-5	1965-9	1960-9
Carlow	6	42	50	65	43	136	69	42	141
Dublin	46	34	96	72	52	161	64	45	136
Kildare	10	39	54	72	76	203	50	41	112
Kilkenny	27	23	57	62	49	142	59	43	128
Laois	6	31	39	50	57	137	49	49	122
Longford	15	17	35	77	61	185	41	48	109
Louth	34	29	73	66	68	179	50	45	118
Meath	19	22	45	87	49	179	55	49	130
Offaly	5	26	32	55	37	112	55	46	125
Westmeath	11	12	24	80	53	176	58	36	115
Wexford	17	41	65	72	47	153	61	42	129
Wicklow	31	17	53	62	62	163	57	42	122
<i>Leinster</i>	19	29	53	70	54	162	61	44	133
Leinster excluding Dublin	17	28	49	67	57	162	55	43	122
Clare	20	15	38	129	101	461	72	54	166
Cork	42	18	68	56	61	150	65	44	138
Kerry	18	18	39	64	79	194	62	46	136
Limerick	35	14	54	84	47	171	64	46	138
Tipperary	30	16	52	58	52	140	62	54	149
Waterford	32	22	61	73	62	180	73	38	138
<i>Munster</i>	32	17	55	66	62	168	65	46	141
Galway	15	16	33	56	50	133	58	60	153
Leitrim	15	8	24	39	41	97	60	35	116
Mayo	21	12	36	73	51	162	53	54	135
Roscommon	26	9	37	53	47	125	47	63	140
Sligo	17	14	34	54	58	143	61	58	155
<i>Connacht</i>	19	13	34	59	51	139	56	57	145
Cavan	42	17	67	71	52	161	44	51	118
Donegal	21	7	29	64	54	153	39	51	111
Monaghan	41	35	90	82	66	201	32	53	102
<i>Ulster (part)</i>	32	17	55	70	56	165	39	52	110
TOTAL	25	20	50	68	56	162	61	46	135
Total excluding Dublin	25	19	49	66	58	163	59	47	133

Agriculture was 35 per cent (in Cavan), whereas in 1960 fifteen counties had levels of dependence on agriculture higher than this. Of these the highest was Roscommon at 47 per cent. Eight others exceeded 40 per cent, while only two counties derived less than 25 per cent of their income from agriculture (i.e. Dublin 2 per cent and Louth 15 per cent). By 1969 almost half the counties, including less prosperous counties such as Offaly, Sligo and Donegal, obtained less than a quarter of their income from agriculture. This reflects not merely the decline in the national importance of agriculture, but also the below average performance of agriculture in some counties. (cf. Table 5). Part of this slow rate of increase may be attributable to the inferior physical resources of an area, which make it difficult to expand agricultural output without great cost. Part may be due to the structure of the agricultural price supports which tend to favour the commodities on which the commercial farming regions have become specialised. Part may be due to the greater willingness and ability of large farmers to benefit from these supports. Other factors, such as variations in land potential and managerial ability, may also play a role.

In [1], the special circumstances of Leinster agriculture in 1965 were advanced as a partial explanation for the below-average increases in personal income in several Leinster counties between 1960 and 1965. Between 1965 and 1969 Leinster agricultural incomes rose faster than average, so that for the decade as a whole the province equalled the national rate of increase. However, an area in North Leinster consisting of Westmeath, Offaly, Longford, Laois, and Meath did not do as well as the rest of Leinster. Their respective rates of increase in percentages, 24, 32, 35, 39 and 45, all fell short of the national increase of 50 per cent.

In the 1960-5 period, the Southern dairying areas had experienced a growth in income well above the average. While this did not continue, except in Kilkenny and Waterford, in the next four years, the overall picture for the decade was of above-average increases in agricultural incomes in Munster. In the designated areas, Cavan and Monaghan had extremely high increases in agricultural incomes between 1960 and 1965. This continued in Monaghan between 1965-69, so that the rate of increase in income there over the decade was the second highest in the country, only surpassed by Dublin. Incomes in Cavan did not grow quite as fast as nationally between 1965 and 1969. Nevertheless over the decade Cavan's rate of increase was only surpassed by four counties. For the rest of the designated areas the position was less favourable. Only Roscommon exceeded the average rate of increase between 1960 and 1965, and none of these counties reached it in the next four-year period. Indeed Donegal, Leitrim and Roscommon did not increase at even half the national rate. As a consequence the rate of increase in agricultural incomes in Connacht over the decade was only about two-thirds that of the national average. In Clare and Kerry it was somewhat more than two-thirds; in Donegal somewhat less. Leitrim and Westmeath experienced the slowest rise in agricul-

tural income. These were followed by Donegal and Offaly. The result of these low rates of increase was to reinforce the effects of the low growth in income from industrial employment in counties like Leitrim and Offaly, or to detract from the real advances made in industrial income in counties like Longford and Westmeath.

Employee Remuneration in Industry (Tables 4 and 5)

In recent years strenuous efforts have been made by the Central Development Committee through the county development teams to spur on development in the twelve counties* of the West and North. As yet no firm figures are available by which to measure the degree of success attending these endeavours in the fields of either industry or tourism. Some estimates of employment in certain "allocated" industries of the *Census of Industrial Production* are given for 1969 in Part II (Table 16). As mentioned in the methodological section, these may be on the conservative side of the actual increases in employment. As they stand they show a national rate of 12 per cent increase in employment between 1965 and 1969. Western and Northern areas increased at a faster rate, 22 per cent in Ulster, 20 per cent in Connacht, over 50 per cent in Kerry and Clare and 36 per cent in Longford. Laois-Offaly was an area of low income growth outside the designated areas in the period 1960 to 1965. Since then, employment in industry in Laois is estimated to have increased by 20 per cent up to January 1970. Offaly, however, was the only county in the State estimated to have suffered a decline in industrial employment in the same period. The decline, 19 per cent, was so severe that several areas of the county have been added to the designated areas for industrial promotion purposes. Within the designated areas, the slowest growing industrial populations were in Mayo, Leitrim and Cavan, where the rate of increase was at or just below the national level. This was in marked contrast to the rest of the area** which is estimated to have increased its industrial employment at three times the national rate. On the other hand, Dublin and Cork are estimated to have increased at about half the national rate and Limerick even slower.

This would appear to indicate a welcome swing towards regional development outside the main centres of population and wealth. However, these considerable advances in industrial employment do not appear to be fully reflected in the pattern of personal income in the less developed counties. One possible reason for this is explained in the methodology section. There was no alternative but to weight remuneration of new employment at the counties' relative weighting in 1963—the last year for which county estimates of employee remuneration, (as distinct from employment), were available. For example, in that year remuneration per person at work in County

*Including West Cork as a county.

**This excludes West Cork for which separate figures are not available.

Galway was 81.5 per cent of that in Dublin. Thus an increase in employment of almost 25 per cent would be required in County Galway to equal the income generated by an increase of 20 per cent in employment in Dublin.

Another part of the explanation relates to the relatively small contribution made by employee remuneration in industry to personal incomes in many counties. In 1969, industrial remuneration contributed over 24 per cent of personal incomes nationally (see Table 4) compared with 20 per cent in 1960. In much of Connacht it was 14 per cent or less, and in Ulster, Sligo and Longford it was around 17 per cent. In contrast it was about 25 per cent in Leinster apart from Dublin (29 per cent), and nearly as high in Munster excluding Kerry. The two counties which showed the greatest change in structure were Clare, where the contribution of industrial remuneration increased from under 12 per cent to over 24 per cent, and Kildare where it grew from 21 per cent to 29 per cent. Other counties exhibiting changes considerably above the average were Louth, Meath, Longford, Monaghan, Kerry and Waterford. In 1960 industrial remuneration contributed 8.5 per cent in Roscommon, 9 per cent in Leitrim, 10 per cent in Mayo and 12 per cent in Galway to personal incomes. These counties continued to have a structure in 1969 where industrial remuneration was of less importance to income than it was elsewhere in the State. In both the 1960-1965 and 1965-1969 periods Connacht had a lower rate of increase in employee remuneration than nationally and only in Mayo was the result for the 'sixties equal to the national rate of increase.

Employee Remuneration Other Sectors. (Tables 4 and 5)

Connacht had the largest increase in income from employment in sectors other than industry and agriculture in the 'sixties. In the first part of the decade the increase in Connacht was somewhat below the national average, but by no means as low as in Ulster. In the second period Connacht and (to a lesser extent) Ulster had more rapid rates of growth than Leinster and Munster. The net result for the decade was an above-average increase in Connacht but not in Ulster. In Kildare, Longford, Louth and Westmeath the increase in income from this source was below-average over the 'sixties, in contrast with the above-average increase in income from industrial remuneration in these counties in the same period. Laois and Offaly had below-average increases from both sources during the decade.

An interesting feature of Table 4 is the contrast between employee remuneration from industry and that from other non-agricultural sectors as a contributor to personal incomes in each county. Apart from Dublin and Westmeath, where the latter contributed 40 per cent and 33 per cent respectively, its contribution was over a fairly narrow range from 20 per cent in Meath to 29 per cent in Limerick. On the other hand, industrial remuneration ranged from just over 10 per cent in Leitrim and Roscommon to 40 per cent in Louth (or 29 per cent in Dublin if Louth is excluded as an extreme case).

In addition, although industrial remuneration is less important nationally than other non-agricultural remuneration, in the more prosperous counties the position is generally revised. In Dublin, however, the "head office effect" gives a dominant position to other non-agricultural remuneration. In several less prosperous counties, such as in Galway, Leitrim and Roscommon, income derived from remuneration in industry is less than half that from other non-agricultural sectors. The contrast is less marked but very significant in several other counties.

Other Income Sources (Tables 4 and 6)

Between 1960 and 1969 personal income derived from current transfer payments more than trebled nationally. This rapid rate of growth has meant that transfer payments have assumed a greater share (10 per cent) in personal income than they had in 1960 (7 per cent). In Leitrim they contributed 19.5 per cent of personal income in 1969, and were almost twice as important in that county as industrial remuneration. They were also of greater importance than industrial remuneration in Mayo, Roscommon and as important in Galway. It is noteworthy that over the 'sixties the most prosperous counties (Dublin, Louth and Cork) were among those which exhibited the greatest rates of increase in transfer payments. Galway, Westmeath and Donegal also had high rates of increase.

The slowest rates of increase were in some of the less prosperous counties, Cavan, Monaghan, Sligo and Roscommon. Part of the reason for this strange result may be that payment under new forms of social welfare, such as those under the Redundancy Payments Act 1967, tend to go to the more industrialised counties where redundancy is more likely to occur. Part of the explanation may lie in the methodology employed to allocate transfers involving Universities and non-profit organisations. As explained in the methodological section, payments were generally assigned to the county where an organisation or institution had its headquarters or its secretary. This allocation might not coincide with the county where the ultimate beneficiaries resided. Payments to these organisations increased substantially in recent years.

Table 6 also shows the changes in income from sources other than agriculture, domestic employee remuneration and transfer payments. The rate of increase would almost appear to be a function of the prosperity of the county, being highest in Dublin at 119 per cent and lowest in Leitrim at 48 per cent. This is plausible enough considering that over 56 per cent of the items included are accounted for under interest, dividends and rents. *A priori* the beneficiaries could be expected to be more numerous in the richer counties. This category of "other sources" also includes income from self-employment outside agriculture, which tends to be greater in the richer counties. The reverse is true of emigrants' remittance and of employee remuneration from abroad, but these are less significant elements in this group of income sources.

This illustrates how difficult it is to narrow the income gap between counties.

TABLE 6: *Percentage Increase in Income Derived from Transfer Payments and Non-Wage Earnings*

County	Transfer Payments			Other Income Sources (a)			Total		
	1960-5	1965-9	1960-9	1960-5	1965-9	1960-9	1960-5	1965-9	1960-9
Carlow	68	77	197	37	43	95	41	45	105
Dublin	79	92	244	49	47	119	63	50	144
Kildare	61	81	191	44	42	104	43	52	118
Kilkenny	56	78	176	37	38	89	43	39	98
Laois	60	74	178	36	35	83	30	44	87
Longford	61	79	187	32	41	86	36	42	93
Louth	77	79	216	38	42	95	52	53	134
Meath	65	75	189	38	34	86	42	39	96
Offaly	68	73	190	36	36	85	36	39	89
Westmeath	70	81	206	37	38	89	45	38	100
Wexford	60	75	181	34	39	86	40	45	103
Wicklow	63	81	195	41	42	101	48	44	113
<i>Leinster</i>	72	86	220	45	45	111	55	48	129
Leinster excluding Dublin	64	78	192	38	39	92	42	44	105
Clare	58	74	176	36	37	87	49	48	121
Cork	69	80	204	39	43	98	52	44	119
Kerry	65	81	199	32	40	83	38	43	97
Limerick	61	79	188	39	43	99	53	40	114
Tipperary	69	74	194	32	40	84	44	39	100
Waterford	57	80	183	34	42	89	53	44	120
<i>Munster</i>	65	79	195	36	42	93	49	43	113
Galway	71	84	215	39	39	94	39	44	100
Leitrim	70	69	186	9	35	48	30	31	71
Mayo	66	78	195	22	40	71	37	41	93
Roscommon	59	72	174	33	37	83	37	35	85
Sligo	53	74	167	31	37	80	38	43	97
<i>Connacht</i>	65	78	195	30	39	80	38	41	93
Cavan	52	66	153	28	34	72	44	36	96
Donegal	72	81	211	26	38	74	37	41	93
Monaghan	50	74	161	25	37	71	42	48	109
<i>Ulster (part)</i>	63	76	186	26	37	73	40	41	98
TOTAL	68	82	206	40	43	100	50	45	119
Total excluding Dublin	65	78	193	35	40	89	44	43	106

(a) Income sources not specifically mentioned already in Tables 5 or 6 i.e. self-employment outside agriculture, foreign remuneration of employees, emigrants' remittances and interest dividends and rent.

Poorer counties tend to have less favourable resources and hence lower agricultural output. This implies that they benefit relatively little from a system of agricultural price supports. This disadvantage must be compensated for by the expansion of non-agricultural employment. In order to narrow the income gap, the poorer counties must get a disproportionate share of new non-agricultural employment, and these new jobs should pay at a rate not significantly below the national average rate. Because the more prosperous counties have been prosperous longer, their residents will tend to own a disproportionate amount of property from which they derive income. This effect must also be counteracted if parity is the objective. However, a less ambitious objective may satisfy many regional planners—a significant advance in real income in all regions. This has occurred in Ireland during the 'sixties.

Real Income

Between 1960 and 1969 the consumer price index rose 47 per cent. Table 6 shows that all counties experienced increases in total income measured in current terms which were greatly in excess of this rate of growth. Thus the slowest increase in income, 71 per cent in Leitrim, represented an advance of 16 per cent in real terms. This was a significant increase even if comparatively modest compared to the national increase (excluding Dublin) of 40 per cent. Three other slow growing areas were the midland counties of Roscommon, Laois and Offaly where real increases, nevertheless, were of the order of 26–27 per cent. Donegal, Mayo and Longford all reported increases of 31 per cent in real terms while Meath, Westmeath, Kilkenny, Tipperary, Kerry, Galway, Sligo and Cavan ranged from 33 per cent to 36 per cent in increases in real income. At the other end of the scale the Dublin area, Clare and the three Munster city counties of Cork, Limerick and Waterford all exhibited increases in real income in the region of 50 per cent.

Population Change (Table 7)

The discussion up to this point has been concerned with changes in total income. It is now necessary to consider changes in income per head, since a fast growing total income shared among a growing population may provide the same increase in income per head as a slower growing income distributed among a declining population. We have to bear in mind that in Ireland many people attach importance to achieving at least some population growth, as a goal of economic policy in itself.

The 'sixties were a period when the decline in national population was finally halted and a slow growth experienced. As shown in Table 7, Dublin accounted for practically all of the net growth in national population between 1960 and 1969. However, as the table also shows, the improvement in population trends in the second half of the decade applied to all counties. Between 1965 and 1969 in each county, either population growth was higher than between 1960 and 1965, or population decline was lower, or a decline in the

earlier period was replaced by an increase in the later period. More detailed examination of the Census data reveals that in the recent period population growth has occurred over about one third of the rural districts of the country.

TABLE 7: *Estimates of Population and of Population Change by County*

County	June 1960	June 1965	June 1969	Population Change (%)		
	Numbers	Numbers	Numbers	1960-5	1965-9	1960-9
Carlow	33,424	33,555	33,874	0.4	1.0	1.3
Dublin	716,449	783,540	830,469	9.4	6.0	15.9
Kildare	64,644	66,106	69,731	2.3	5.5	7.9
Kilkenny	62,031	60,644	61,339	-2.2	1.1	-1.1
Laois	45,372	44,666	45,085	-1.6	0.9	-0.6
Longford	30,992	29,237	28,494	-5.7	-2.5	-8.1
Louth	67,650	69,198	73,016	2.3	5.5	7.9
Meath	65,368	66,993	70,113	2.5	4.7	7.3
Offaly	51,599	55,689	51,793	0.2	0.2	0.4
Westmeath	53,050	52,894	53,327	-0.3	0.8	0.5
Wexford	83,901	83,418	85,033	-0.6	1.9	1.3
Wicklow	58,688	60,135	64,225	2.6	6.8	9.4
<i>Leinster</i>	<i>1,333,168</i>	<i>1,402,075</i>	<i>1,466,499</i>	<i>5.2</i>	<i>4.6</i>	<i>10.0</i>
<i>Leinster excluding</i>						
Dublin	616,719	618,535	636,030	0.3	2.8	3.1
Clare	74,223	73,613	74,408	-0.8	1.1	0.2
Cork	331,376	338,314	347,524	2.1	2.7	4.9
Kerry	117,300	113,336	112,886	-3.4	-0.4	-3.8
Limerick	134,020	136,754	139,315	2.0	1.9	4.0
Tipperary	124,661	122,964	123,062	-1.4	0.1	-1.3
Waterford	71,828	72,834	75,584	-1.4	3.8	5.2
<i>Munster</i>	<i>853,408</i>	<i>857,815</i>	<i>872,779</i>	<i>0.5</i>	<i>1.7</i>	<i>2.3</i>
Galway	150,737	148,572	148,262	-1.4	-0.2	-1.6
Leitrim	34,008	31,007	29,104	-8.8	-6.1	-14.4
Mayo	124,788	116,714	111,614	-6.5	-4.4	-10.6
Roscommon	59,891	56,676	54,453	-5.4	-3.9	-9.1
Sligo	54,054	51,608	50,595	-4.5	-2.0	-6.4
<i>Connacht</i>	<i>423,478</i>	<i>404,577</i>	<i>394,028</i>	<i>-4.5</i>	<i>-2.6</i>	<i>-7.0</i>
Cavan	57,366	54,408	53,146	-5.2	-2.3	-7.4
Donegal	115,075	109,343	108,192	-5.0	-1.1	-6.0
Monaghan	47,834	45,935	46,056	-4.0	0.3	-3.7
<i>Ulster (part)</i>	<i>220,275</i>	<i>209,686</i>	<i>207,394</i>	<i>-4.8</i>	<i>-1.1</i>	<i>-5.8</i>
Total	2,830,329	2,874,153	2,940,700	1.5	2.3	3.9
Total excluding						
Dublin	2,113,880	2,090,613	2,110,231	-1.1	0.9	-0.2

Note: The estimates of population for 1960 and 1965 and 1969 have been obtained by linear interpolation between the adjacent Census of Population.

The estimates of population presented in Table 7 are based on linear interpolation between adjacent *Censuses of Population*. These have been used in preference to the Census data for April 1961 and 1966 which were used previously. This change was necessary once 1969 income had to be calculated if comparisons were to be made on strictly equal bases.

Personal Income per head (Table 8)

To obtain *per capita* figures, the estimates of total personal income (Tables 1, 2 and 3) have been divided by the population estimates (Table 7). The results are presented in Table 8, at both current prices and at constant 1969 prices. To obtain constant price estimates, the figures for 1960 and 1965 have been inflated by the inverse of the rise in the consumer price index. With base 1958 = 100, the level of this index was 117.0 in 1960, 143.9 in 1965 and 172.0 in 1969.

Income Arising (Table 9)

Table 9 sets out estimates for income arising in each county, in absolute and in *per capita* terms, for 1960 and 1965. The methodology used to obtain these estimates is described in Part III of the paper, which also contains (Tables 26 to 29) a sectoral breakdown of the estimates. Data limitations preclude the calculation of comparable estimates for 1969.

In general, the growth in income arising between 1960 and 1965 was parallel to that of personal income, but it was considerably higher in four counties, Longford, Offaly, Carlow and Clare. In Dublin, Louth and Donegal it was somewhat lower.

Apart from Louth (where the two measures of income yield almost identical figures) personal income was always greater than income arising,* though the margin differed between 1960 and 1965. For example, by 1965 Clare's 1960 margin of 12 per cent had decreased to 4 per cent, but Dublin's margin of 4 per cent had increased to 6 per cent. The margins in the North and West were higher than elsewhere, indicating the relative influence of transfer payments and emigrants' remittances in these areas.

Comparison of County Income Performance (Table 10)

Table 10 shows the percentage changes in real *per capita* personal income between 1960, 1965 and 1969; the percentage changes in real *per capita* income arising between 1960 and 1965; and the relative rankings of the counties according to personal income per head in 1960 and 1969, and according to the change in personal income per head between 1960 and 1969.

*For Attwood and Geary, [2] income arising in Dublin and Louth in 1960 was considerably higher than personal income.

TABLE 8: *Per Capita Estimates of Personal Income at Current and 1969 Prices (£ per head)*

<i>County</i>	<i>At Current Prices</i>			<i>At 1969 Prices*</i>		
	<i>1960</i>	<i>1965</i>	<i>1969</i>	<i>1960</i>	<i>1965</i>	<i>1969</i>
Carlow	186	261	376	274	313	376
Dublin	262	389	551	385	465	551
Kildare	204	285	411	300	341	411
Kilkenny	184	269	368	271	321	368
Laois	171	225	322	251	269	322
Longford	151	217	317	221	259	317
Louth	203	302	439	298	361	439
Meath	183	253	334	268	302	334
Offaly	177	240	333	260	287	333
Westmeath	173	251	344	254	300	344
Wexford	176	247	351	258	295	351
Wicklow	192	277	372	282	331	372
<i>Leinster</i>	<i>226</i>	<i>332</i>	<i>470</i>	<i>332</i>	<i>397</i>	<i>470</i>
Leinster excluding Dublin	183	260	365	269	311	365
Clare	167	251	368	246	300	368
Cork	205	305	428	301	364	428
Kerry	170	243	348	251	291	348
Limerick	195	293	402	287	351	402
Tipperary	190	276	385	279	330	385
Waterford	201	304	421	296	363	421
<i>Munster</i>	<i>193</i>	<i>286</i>	<i>402</i>	<i>283</i>	<i>342</i>	<i>402</i>
Galway	164	231	332	241	276	332
Leitrim	145	207	289	213	248	289
Mayo	146	214	314	214	256	314
Roscommon	151	218	307	222	260	307
Sligo	158	229	333	232	273	333
<i>Connacht</i>	<i>154</i>	<i>222</i>	<i>321</i>	<i>227</i>	<i>266</i>	<i>321</i>
Cavan	155	235	328	228	281	328
Donegal	149	215	306	219	257	306
Monaghan	158	233	343	232	279	343
<i>Ulster (part)</i>	<i>152</i>	<i>224</i>	<i>320</i>	<i>224</i>	<i>268</i>	<i>320</i>
TOTAL	199	295	419	293	353	419
Total excluding Dublin	178	260	368	262	311	368

*The 1960 and 1965 figures have been increased by the rise in the consumer price index between 1960, 1965 and 1969 to standardise the purchasing power of expenditure.

TABLE 9: *Income Arising and Per Capita Income Arising 1960 and 1965 Current Prices and Per Capita Income Arising at 1969 Prices*

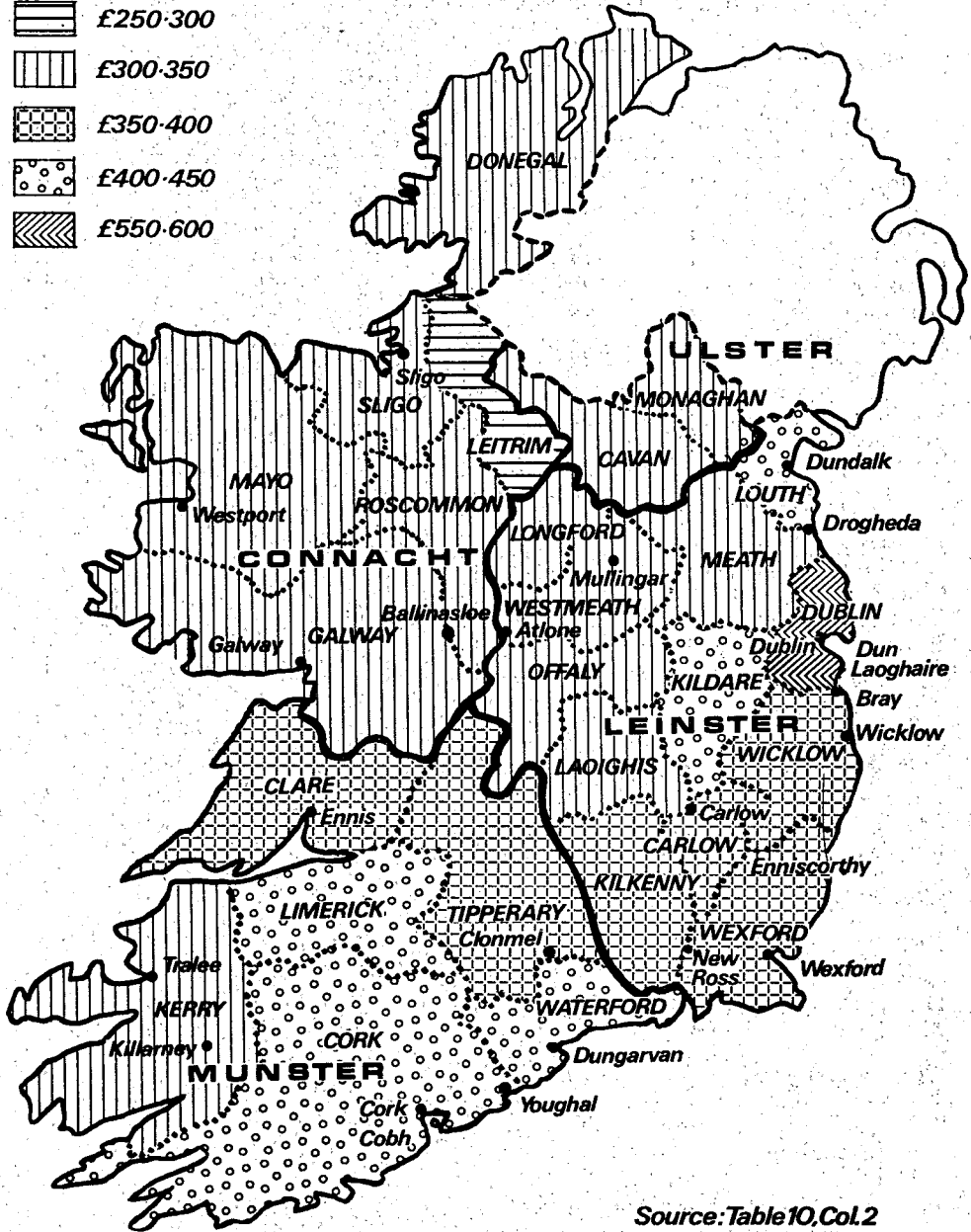
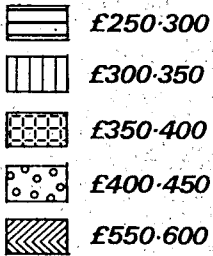
County	Total Income Arising		Per Capita Income Arising Current Prices		Per Capita Income Arising at 1969 Prices	
	1960	1965	1960	1965	1960	1965
	£	£	£	£	£	£
Carlow	5,554	8,267	166	246	244	294
Dublin	181,242	288,404	253	368	372	440
Kildare	12,116	17,512	187	265	275	317
Kilkenny	10,519	14,729	170	243	250	290
Laois	7,341	9,338	162	209	238	250
Longford	3,902	5,384	126	184	185	220
Louth	13,729	20,330	203	294	298	351
Meath	10,744	15,146	164	226	241	270
Offaly	8,678	12,534	168	243	247	290
Westmeath	8,313	11,949	157	226	231	270
Wexford	13,127	18,124	157	217	231	259
Wicklow	9,357	13,824	159	230	234	275
<i>Leinster</i>	<i>284,621</i>	<i>435,542</i>	<i>214</i>	<i>311</i>	<i>315</i>	<i>372</i>
Leinster excluding Dublin	103,379	147,138	168	238	247	284
Clare	11,051	17,785	149	242	219	289
Cork	63,660	96,801	192	286	282	342
Kerry	17,501	23,802	149	210	219	251
Limerick	24,035	36,917	179	270	263	323
Tipperary	21,498	30,499	173	248	254	296
Waterford	13,558	20,991	189	288	278	344
<i>Munster</i>	<i>151,304</i>	<i>226,795</i>	<i>177</i>	<i>264</i>	<i>260</i>	<i>316</i>
Galway	21,362	29,312	142	197	209	235
Leitrim	4,136	5,290	122	171	179	204
Mayo	14,268	19,627	114	168	168	201
Roscommon	7,695	10,359	129	183	190	219
Sligo	7,660	10,644	142	206	209	246
<i>Connacht</i>	<i>55,120</i>	<i>75,232</i>	<i>130</i>	<i>186</i>	<i>191</i>	<i>222</i>
Cavan	7,862	11,446	137	210	201	251
Donegal	14,230	19,007	124	174	182	208
Monaghan	6,620	9,408	138	205	203	245
<i>Ulster (part)</i>	<i>28,712</i>	<i>39,861</i>	<i>130</i>	<i>190</i>	<i>191</i>	<i>227</i>
TOTAL	519,758	777,430	184	271	270	324
Total excluding Dublin	338,516	489,026	160	234	235	280

TABLE 10: *Comparison of County Performance*

County	Changes in Real Per Capita Income (%)				Ranking (a) by Personal per capita income		
	Personal Income		Income Arising		Absolute Level	Change	
	1960-5	1965-9	1960-9	1960-5	1960	1969	1960-9
Carlow	14	20	37	21	9	8	17
Dublin	21	18	43	18	1	1	6
Kildare	14	21	37	15	3	5	17
Kilkenny	19	15	36	16	10	10	19
Laois	7	20	28	5	15	21	24
Longford	17	22	43	29	23	22	6
Louth	21	22	47	18	4	2	3
Meath	12	11	25	12	11	16	26
Offaly	11	16	28	17	12	17	24
Westmeath	18	15	35	17	14	14	22
Wexford	15	19	36	13	13	12	19
Wicklow	17	12	32	17	7	9	23
<i>Leinster</i>	20	18	42	18	—	—	—
Leinster excluding							
Dublin	16	17	36	15	—	—	—
Clare	22	23	50	32	17	11	1
Cork	21	18	42	21	2	3	9
Kerry	16	20	39	15	16	13	12
Limerick	22	15	40	22	6	6	11
Tipperary	18	17	38	17	8	7	14
Waterford	23	16	42	24	5	4	9
<i>Munster</i>	21	18	42	21	—	—	—
Galway	15	20	38	13	18	19	14
Leitrim	16	17	36	14	26	26	19
Mayo	19	23	47	20	25	23	3
Roscommon	17	18	38	16	22	24	14
Sligo	18	22	43	18	19	18	6
<i>Connacht</i>	17	20	41	16	—	—	—
Cavan	24	17	44	25	21	20	5
Donegal	18	19	39	14	24	25	12
Monaghan	20	23	48	20	19	15	2
<i>Ulster (part)</i>	20	19	43	19	—	—	—
TOTAL	20	19	43	20	—	—	—
Total excluding							
Dublin	19	18	40	17	—	—	—

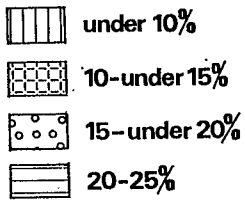
(a) 1 means highest, 26 means lowest.

Personal Income per Capita, 1969



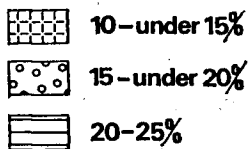
Source: Table 10, Col. 2

Growth rate in Personal Income per Capita, 1969 prices 1965-69



Source: Table 10, Col. 2

Growth rate in Personal Income per Capita, 1969 prices 1965-69



Source: Table 10, Col. 2

One notable feature of the table is the similarity of the increases in real personal income per head in each of the four provinces—ranging only from 41 per cent to 43 per cent. If Dublin is excluded, Leinster was the slowest growing at 36 per cent. Indeed, nine of the ten counties with the lowest estimated increases in real income per head were in this province, i.e. all Leinster except Louth, Longford and Dublin. In contrast six counties in the designated areas were amongst the eight fastest growing—Clare, Monaghan, Mayo, Cavan, Sligo and Longford. Clare, the fastest growing county, had a rate of real increase (50 per cent), twice that of Meath (25 per cent) the slowest. In making these observations it should be remembered that the rate of growth in *per capita* income is influenced by the absolute level of income at the outset and by the change in population. Thus while Dublin had the largest absolute increase in *per capita* income, its rate of growth was not the largest in the State because of its very high initial level of *per capita* incomes and because it was concomitant with the largest growth in population in the State. The converse holds true of growth in Western counties. Indeed the higher rate of growth in income *per capita* in the Western counties was associated with a widening of the absolute gap between the level of income *per capita* in these counties and that in Leinster as a whole.

While it is true to say that the absolute size of the gap between personal income *per capita* (at 1969 prices) in Connacht and Leinster widened since 1965, the extent of the widening was small (£18 per head) and the ratio of Connacht income relative to that of Leinster rose from 67 per cent to 68 per cent. The gap between Leinster (excluding Dublin) and Connacht actually narrowed by £1 (*per capita* income, 1969 prices). Progress may appear slow but arresting the divergence is the first step to correcting the imbalance. At least a measure of success has been achieved in furthering economic well-being in the less developed parts of the country. The deterioration in the relative position of several western and midlands counties is nonetheless striking. A more detailed and accurate picture of these regional achievements and problems will be revealed by an analysis of the 1971 Census data on industries and occupations in conjunction with the present findings.

A. *The Methodology of the 1969 Estimates*

PART II: METHODOLOGY OF THE PERSONAL INCOME ESTIMATES

Introduction

The *Methodology of Personal Income Estimation by County* [3] presents a detailed statement of the methods used in estimating personal incomes by county in 1960 and 1965. These two years were sufficiently close to the *Censuses of Population* taken in April 1961 and 1966 respectively to make it reasonable to assume that the average employment level among residents in any county was not greatly different from that in the Census. The methodology employed was, therefore, firmly based on Census material. Income estimation by county for 1969 had to be undertaken without the benefit of similar Census data on the distribution of employment by sector. In fact, the county levels of total population could only be estimated approximately by linear interpolation between the 1966 and 1971 reported levels. In the absence of firm data, certain assumptions had to be made about the average levels of employment in each county in 1969. These assumptions are set out in this section, together with the modifications to the basic methodology introduced in response to differences in data availability between 1969 and 1960-1965.

It is intended that this section be read in conjunction with [3]. This means that unnecessary repetition can be avoided in the definition of terminology and attention can be directed at those methods employed for 1969 which differ substantially from the methodology used for 1960 and 1965. Accordingly, unless it is specifically stated to the contrary, the methodology can be assumed to be that reported for the earlier years.

Agriculture (Tables 11 to 15)

Since 1969 was not a year in which a full agricultural enumeration took place, county estimates for crops, livestock and employment, where published, were correct only to the nearest hundred. In the case of employment this may influence the results somewhat in counties reporting small numbers of employees. In addition, many county distributions, available for 1965, were not available for 1969, e.g. barley and potato sales off farms, turf drawn from the bog, area of grassland treated with fertiliser, production of farmers' butter, breeds of ewes, numbers of machinery, etc. In all these cases the 1965 pattern

was assumed to continue to obtain in 1969. Data in the *Statistical Abstract* were used previously to allocate sugar beet and wheat output. Since the *Statistical Abstract* for 1969 was not available at the time of estimation, Cómhlucht Siúicre Éireann provided the necessary estimates for sugar beet deliveries, while wheat output was allocated proportionate to acreage. Grass-seed was also distributed proportionately to the acres of rye-grass grown for seed.

TABLE 11: *Output of Livestock (a) and Livestock Products 1969 (£,000's)*

County	Cattle	Milk	Horses etc.	Sheep and Wool	Pigs	Poultry	Total Livestock and Products (b)	Alternative Estimate of Pig Output (c)
Carlow	1,449	471	70	650	614	438	3,712	555
Dublin	1,208	1,080	269	242	1,099	373	4,278	994
Kildare	2,670	1,783	410	562	480	377	6,304	434
Kilkenny	4,232	3,191	129	493	1,797	330	10,182	1,625
Laois	3,123	1,023	52	259	1,208	346	6,049	1,092
Longford	1,867	787	26	107	559	196	3,574	505
Louth	1,454	821	33	251	406	169	3,103	307
Meath	5,013	2,465	271	1,170	798	786	10,544	721
Offaly	3,047	583	72	376	798	437	5,380	722
Westmeath	3,046	630	95	393	641	288	5,158	580
Wexford	4,101	2,056	175	1,048	2,186	851	10,535	1,977
Wicklow	1,925	1,381	62	887	694	675	5,643	628
<i>Leinster</i>	<i>33,135</i>	<i>16,270</i>	<i>1,663</i>	<i>6,438</i>	<i>11,280</i>	<i>5,267</i>	<i>74,523</i>	<i>10,200</i>
Clare	5,088	3,254	152	211	561	387	9,671	507
Cork	13,623	17,035	313	799	7,675	1,681	41,174	6,940
Kerry	5,554	6,893	110	433	2,338	612	15,963	2,114
Limerick	5,957	3,717	206	71	1,786	1,618	18,364	1,615
Tipperary	8,554	7,205	326	672	3,193	483	20,517	2,887
Waterford	3,155	3,272	124	234	1,153	510	8,455	1,043
<i>Munster</i>	<i>41,932</i>	<i>46,435</i>	<i>1,230</i>	<i>2,420</i>	<i>16,707</i>	<i>5,291</i>	<i>114,143</i>	<i>15,107</i>
Galway	6,523	2,222	136	3,236	1,441	972	14,776	1,303
Leitrim	1,821	837	16	87	519	207	3,504	409
Mayo	5,330	1,794	71	1,036	1,350	770	10,563	1,221
Roscommon	3,976	1,395	44	1,014	404	422	7,334	365
Sligo	2,568	1,355	28	282	656	307	675	593
<i>Connacht</i>	<i>20,217</i>	<i>7,604</i>	<i>294</i>	<i>5,653</i>	<i>4,370</i>	<i>2,678</i>	<i>41,395</i>	<i>3,952</i>
Cavan	3,576	2,987	29	128	2,580	751	10,063	2,333
Donegal	2,926	1,369	28	717	847	612	6,574	766
Monaghan	2,334	2,269	20	43	2,359	265	6,691	2,133
<i>Ulster (part)</i>	<i>8,836</i>	<i>6,624</i>	<i>77</i>	<i>888</i>	<i>5,785</i>	<i>4,013</i>	<i>26,327</i>	<i>5,231</i>
TOTAL	104,121	76,933	3,264	15,399	38,142	17,249	256,389	34,489

(a) Including changes in livestock numbers on farms.

(b) Including honey.

(c) see text.

TABLE 12: *Output of Milk by Use, 1969 (£000's)*

<i>County</i>	<i>Milk Used in Industry</i>	<i>Direct Consumption</i>	<i>Farmers' Butter Buttermilk etc.</i>	<i>Total</i>
Carlow	186	285	20	491
Dublin	90	990	7	1,087
Kildare	616	1,167	21	1,804
Kilkenny	2,805	386	10	3,201
Laois	734	289	39	1,062
Longford	583	205	32	820
Louth	156	666	30	852
Meath	392	2,073	42	2,507
Offaly	208	374	68	650
Westmeath	219	411	66	696
Wexford	1,405	651	118	2,174
Wicklow	277	1,103	19	1,399
<i>Leinster</i>	<i>7,670</i>	<i>8,600</i>	<i>471</i>	<i>16,741</i>
Clare	2,732	522	18	3,272
Cork	14,536	2,499	48	17,083
Kerry	6,120	772	22	6,914
Limerick	7,898	819	9	8,726
Tipperary	6,481	784	24	7,289
Waterford	2,853	420	7	3,280
<i>Munster</i>	<i>40,619</i>	<i>5,816</i>	<i>128</i>	<i>46,563</i>
Galway	1,143	1,080	246	2,469
Leitrim	598	239	18	855
Mayo	913	881	212	2,006
Roscommon	960	435	80	1,475
Sligo	996	359	22	1,377
<i>Connacht</i>	<i>4,610</i>	<i>2,994</i>	<i>578</i>	<i>8,182</i>
Cavan	2,593	394	13	3,000
Donegal	643	725	75	1,443
Monaghan	1,951	317	16	2,284
<i>Ulster (part)</i>	<i>5,187</i>	<i>1,437</i>	<i>104</i>	<i>6,728</i>
Total	58,087	18,846	1,281	78,214

TABLE 13: *Purchases of Certain Farm Materials 1969 (£000's)*

<i>County</i>	<i>Feed</i>	<i>Fertiliser and Lime</i>	<i>Seeds</i>	<i>Total</i>
Carlow	814	516	193	1,523
Dublin	1,166	411	177	1,754
Kildare	1,003	726	258	1,987
Kilkenny	1,911	912	287	3,110
Laois	1,295	638	197	2,130
Longford	663	216	26	905
Louth	537	408	155	1,100
Meath	1,731	970	251	2,952
Offaly	1,067	538	138	1,743
Westmeath	887	382	65	1,334
Wexford	2,313	1,474	557	4,344
Wicklow	1,114	638	171	1,923
<i>Leinster</i>	<i>14,500</i>	<i>7,827</i>	<i>2,474</i>	<i>24,805</i>
Clare	1,188	861	43	2,092
Cork	7,987	3,800	926	12,713
Kerry	2,606	1,070	145	3,821
Limerick	3,130	852	38	4,020
Tipperary	3,551	1,599	262	5,412
Waterford	1,495	812	199	2,506
<i>Munster</i>	<i>19,958</i>	<i>8,995</i>	<i>1,612</i>	<i>30,564</i>
Galway	2,100	1,210	180	3,490
Leitrim	619	173	17	809
Mayo	1,764	737	119	2,620
Roscommon	936	565	37	1,538
Sligo	872	242	29	1,143
<i>Connacht</i>	<i>6,291</i>	<i>2,927</i>	<i>382</i>	<i>9,600</i>
Cavan	2,506	500	45	3,051
Donegal	1,121	729	85	1,935
Monaghan	3,432	382	78	3,892
<i>Ulster (part)</i>	<i>7,060</i>	<i>1,612</i>	<i>208</i>	<i>8,878</i>
Total	47,809	21,361	4,677	73,847

TABLE 14: *Output of Crops 1969 (£000's)*

<i>County</i>	<i>Cereals</i>	<i>Potatoes and Sugar Beet</i>	<i>Other Crops</i>	<i>Total</i>
Carlow	1,204	751	210	2,165
Dublin	1,078	1,121	3,499	5,698
Kildare	2,111	513	655	3,279
Kilkenny	1,908	800	279	2,987
Laois	1,409	799	185	2,393
Longford	58	99	56	213
Louth	1,574	489	608	2,671
Meath	1,809	322	592	2,724
Offaly	1,078	421	151	1,650
Westmeath	299	133	90	522
Wexford	4,050	1,845	577	6,471
Wicklow	1,005	225	226	1,456
<i>Leinster</i>	<i>17,583</i>	<i>7,518</i>	<i>7,128</i>	<i>32,229</i>
Clare	79	280	193	552
Cork	4,511	3,110	1,531	9,153
Kerry	405	669	344	1,418
Limerick	105	250	196	551
Tipperary	1,764	884	443	3,090
Waterford	893	412	255	1,560
<i>Munster</i>	<i>7,757</i>	<i>5,606</i>	<i>2,961</i>	<i>16,324</i>
Galway	529	1,133	381	2,043
Leitrim	3	138	62	204
Mayo	116	661	335	1,113
Roscommon	115	243	225	584
Sligo	30	212	106	348
<i>Connacht</i>	<i>794</i>	<i>2,387</i>	<i>1,109</i>	<i>4,291</i>
Cavan	48	296	139	483
Donegal	673	1,710	302	2,685
Monaghan	122	373	498	994
<i>Ulster (part)</i>	<i>844</i>	<i>2,378</i>	<i>939</i>	<i>4,162</i>
Total	26,978	17,889	12,138	57,005

TABLE 15: Summary of Incomes Derived from Farming, Forestry and Fishing, 1969 (£000's)

County	Gross value of Output incl. Inventory Change	Total Expenses	Net Output less Expenses	Subsidy under Land Act	Other subsidies not related to Sales (a)	Income Arising	Land Annuities	Wages	Family Farm Income	Income from Fishing	Wages in Forestry	Total Wages (Farm and Forestry)	Total Self-Employed
Carlow	5,882	2,849	3,033	16	91	3,140	58	641	2,441	3	23	664	2,444
Dublin	9,977	3,380	6,596	21	21	6,638	74	1,338	5,227	393	15	1,352	5,620
Kildare	9,635	4,101	5,534	36	104	5,674	129	1,005	4,539	—	30	1,035	4,539
Kilkenny	13,173	5,763	7,410	33	90	7,533	117	840	6,576	47	54	894	6,623
Laois	8,508	4,038	4,471	27	92	4,589	95	526	3,969	—	103	629	3,969
Longford	3,899	1,598	2,301	14	85	2,399	50	132	2,217	—	32	164	2,217
Louth	5,835	2,397	3,439	19	51	3,508	66	517	2,925	56	15	531	2,981
Meath	13,289	5,699	7,591	64	135	7,790	229	1,481	6,079	60	—	1,481	6,139
Offaly	7,203	3,338	3,865	28	110	4,003	99	419	3,484	13	44	463	3,497
Westmeath	5,784	2,611	3,173	36	108	3,316	126	339	2,791	27	37	436	2,817
Wexford	17,007	7,926	9,080	33	175	9,288	117	1,723	7,448	181	111	1,335	7,630
Wicklow	7,106	3,544	3,562	20	208	3,790	71	828	2,892	35	281	1,109	2,927
<i>Leinster</i>	<i>107,297</i>	<i>47,244</i>	<i>60,053</i>	<i>346</i>	<i>1,269</i>	<i>61,668</i>	<i>1,230</i>	<i>9,850</i>	<i>50,588</i>	<i>815</i>	<i>745</i>	<i>10,594</i>	<i>51,403</i>
Clare	10,552	3,481	7,071	34	97	7,201	121	383	6,697	40	109	493	6,737
Cork	50,480	21,786	28,694	93	342	29,130	332	2,775	26,023	425	341	3,116	26,448
Kerry	17,940	6,155	11,785	34	234	12,053	120	929	11,004	243	116	1,044	11,247
Limerick	18,999	6,929	12,070	52	129	12,252	186	1,341	10,725	41	55	1,396	10,766
Tipperary	23,664	9,650	14,014	66	183	14,263	235	1,629	12,399	39	229	1,858	12,438
Waterford	10,021	4,380	5,640	24	98	5,763	84	835	4,843	351	180	1,015	5,195
<i>Munster</i>	<i>131,657</i>	<i>52,382</i>	<i>79,275</i>	<i>303</i>	<i>1,084</i>	<i>80,662</i>	<i>1,079</i>	<i>7,893</i>	<i>71,690</i>	<i>1,141</i>	<i>1,030</i>	<i>8,922</i>	<i>72,831</i>
Galway	17,574	5,717	11,857	61	277	12,194	216	401	11,577	241	190	591	11,818
Leitrim	3,848	1,346	2,502	13	107	2,622	46	79	2,497	1	74	152	2,498
Mayo	12,605	4,043	8,562	45	304	8,912	161	219	8,532	158	106	325	8,689
Roscommon	8,321	2,693	5,628	38	118	5,784	135	168	5,482	—	49	217	5,482
Sligo	5,834	1,898	3,936	23	83	4,042	80	201	3,761	93	44	245	3,854
<i>Connacht</i>	<i>48,182</i>	<i>15,697</i>	<i>32,485</i>	<i>179</i>	<i>889</i>	<i>33,554</i>	<i>637</i>	<i>1,068</i>	<i>31,849</i>	<i>493</i>	<i>463</i>	<i>1,531</i>	<i>32,342</i>
Cavan	10,605	4,583	6,022	24	127	6,172	85	1,316	5,771	45	27	343	5,817
Donegal	9,767	3,905	5,862	26	277	6,165	91	618	5,456	724	229	846	6,180
Monaghan	10,702	5,589	5,113	22	73	5,208	78	231	4,899	—	20	252	4,899
<i>Ulster (part)</i>	<i>31,074</i>	<i>14,077</i>	<i>16,997</i>	<i>71</i>	<i>477</i>	<i>17,545</i>	<i>254</i>	<i>1,165</i>	<i>16,126</i>	<i>769</i>	<i>276</i>	<i>1,441</i>	<i>16,895</i>
TOTAL	318,210	129,401	188,809	900	3,719	193,429	3,200	19,975	170,254	3,217	2,513	22,488	173,471

(a) Calved heifer scheme, beef incentive scheme, farrowed sow and mountain sheep schemes.

FURTHER DATA ON COUNTY INCOMES IN THE SIXTIES

Cattle output was estimated using the June 1969 figures. Strict comparability with the previous applications of the inventory method would have required using the 1970 figures and, therefore, delaying the calculations until the census data for 1970 were completely analysed. Since 1965 the publication of cattle prices classified by age group has been discontinued. The prices used officially to evaluate the change in cattle stocks were, therefore, used to evaluate the county levels of output in 1969. County output levels include numbers of dropped calves, which are not separately identified in the national changes in cattle inventories. The price of these dropped calves was assumed to be £18 each. The average of these prices, weighted by the level of output, was somewhat lower than the average unit value of cattle output in the national estimate, and so yielded a national estimate of cattle output, corrected for inventory changes, 7-8 per cent below the official estimate. Had the prices published by the Department of Agriculture in the *Farm Bulletin* been used instead, the result would have been a larger deviation on the positive side of the official estimate.

Pig output presented some problems, in that the relationship between the June enumeration and output for the year seemed to imply a very considerable increase in sow productivity. Consultation with people knowledgeable in the pig trade suggests that the year was one of considerable smuggling from Northern Ireland, though the estimates varied as to the extent of the inflow. Allowing for a substantial increase in productivity, the inflow can be put at an estimated 200,000 pigs, valued at £3.65 million. If domestic output of pigs were assumed to be lower by this amount, the output of counties could be readily adjusted from the data presented in Table II. However, if the quantity of pig output were reduced, the entire procedure for allocating feed costs by county would have to be recalculated. It is also impossible to allocate the total value of smuggling between counties with any accuracy. For these reasons it has been impossible to correct our estimates of pig output by county for the impact of smuggling.

Payments for industrial milk were available on a county basis for 1965 from the Department of Agriculture. Nineteen hundred and sixty-nine data gave the quantities purchased by county, but no prices. In the absence of up-to-date data, the same relative county prices were assumed for 1969 as obtained in 1965. Thus we must ignore the regional implications of the two-tiered pricing mechanism for creamery milk introduced since 1965. However, in the case of industrial milk output in the Dublin District Milk Board area, the 1969 data enables better estimates to be made compared with 1965.

On the input side, the 1965 feed allocations by class of livestock were increased by the respective changes in the volume of output and by the general price increase. The results corresponded closely to the national totals which they were used to distribute. In the case of fertilisers the simple method used by Attwood and Geary [2] was found in 1965 to give results which were reasonably close to the estimates based on a detailed crop-by-crop approach.

In 1969 five categories of crops were distinguished: oats, other corn crops, sugar beet, other root, green and horticultural crops, and grassland. The 1969 estimates were adjusted to cater for the change in the area of these first four categories in each county and for the change in price. Fertilisers applied to grassland were estimated as a residual and assumed to have the same county distribution as in 1965. On this basis, grassland usage was estimated to increase at double the rate of other crops, and to account for about 60 per cent of total consumption.

For each major category of purchased seed inputs, the 1965 estimate was adjusted to allow for changes in area and price, and the results used to distribute cost. In the case of potatoes, the 1965 procedure of relating domestic sales of certified seed potatoes to the county's requirements of purchased seed was continued. Machinery inputs were also based on the 1965 pattern. Details of rates payments were supplied once again by the Department of Local Government. The Department of Agriculture supplied information on subsidies not related to sales.

In Table 15, figures are provided on the amount of agricultural income paid to farm workers. These figures are subject to a margin of error introduced by rounding the estimates of hired farm workers derived from the 1969 sample agricultural enumeration to the nearest hundred. This error, where it occurs, only relates to the division of income within the county, and does not affect the aggregate. Examination of the 1969 enumeration showed that the rate of decline in the hired labour force was only very slightly slower in the North and West than in the rest of the country. Accordingly, the calculations were based simply on the individual county's rate of decline related to the 1965 wage bill, and the complex calculations for previous years avoided.

Fishing and Forestry (Table 15)

The Fisheries Division supplied up-to-date information on the value of fish catches from the rivers and sea. The Forestry Division provided information on the decline in numbers employed in forestry operations by county (Longford alone had an increase).

Employee Remuneration in Industry (Tables 16 and 17)

The estimation procedures again followed in broad outline those used for 1965. However, some departures from this methodology were necessitated by gaps in the available records. In particular, total numbers at work in each county were last collected and published in the Census of Population in April 1966. CIP records of numbers employed were available for 1968 but the analysis of county levels of remuneration, scheduled for 1968, was not completed so that the most recent data in this regard related to 1963.

CIP Industry

In the previous methodology report [3] a distinction was made between *allocated* and *specified* CIP industries, data for the former being normally

TABLE 16: *Estimated Numbers Employed in Allocated* Industries (excluding Building and Construction) in Selected Years*

County	1963	1965	1968	1969 (prelim.)	Change		
					1963-8	1965-8	1965-9 (per cent)
Carlow	2,539	2,255	2,268	2,268	-271	13	1
Dublin	82,929	83,112	85,881	87,919	2,952	2,769	6
Kildare	3,919	4,196	5,081	5,593	1,162	885	33
Kilkenny	2,989	3,016	3,136	3,195	147	120	6
Laois	1,082	1,120	1,220	1,345	138	100	20
Longford	389	399	463	542	74	64	36
Louth	9,232	9,650	10,715	11,522	1,483	1,065	19
Meath	2,101	2,198	2,467	2,689	366	269	22
Offaly	2,627	2,883	2,433	2,323	-194	-450	-19
Westmeath	1,218	1,206	1,482	1,587	264	276	32
Wexford	2,667	2,668	2,854	2,948	186	192	10
Wicklow	2,463	2,407	3,199	3,568	736	792	48
<i>Leinster</i>	<i>114,155</i>	<i>115,110</i>	<i>121,199</i>	<i>125,499</i>	<i>7,044</i>	<i>6,089</i>	<i>9</i>
Clare	3,064	4,293	5,531	6,755	2,467	1,238	57
Cork	24,028	24,981	25,632	26,452	1,604	651	6
Kerry	2,340	2,721	3,576	4,169	1,236	855	53
Limerick	5,545	6,042	6,048	6,248	503	6	3
Tipperary	5,834	5,855	6,257	6,515	423	402	11
Waterford	4,739	5,107	5,506	6,044	767	399	18
<i>Munster</i>	<i>45,550</i>	<i>48,999</i>	<i>52,550</i>	<i>56,183</i>	<i>7,000</i>	<i>3,551</i>	<i>15</i>
Galway	3,369	3,317	3,787	4,243	418	470	28
Leitrim	355	376	400	418	45	24	11
Mayo	2,322	2,450	2,535	2,740	213	85	11
Roscommon	720	695	883	838	163	188	21
Sligo	1,659	1,764	1,921	2,063	262	157	17
<i>Connacht</i>	<i>8,425</i>	<i>8,602</i>	<i>9,526</i>	<i>10,302</i>	<i>1,101</i>	<i>924</i>	<i>20</i>
Cavan	1,543	1,734	1,833	1,948	290	99	12
Donegal	3,607	3,722	4,112	4,548	505	390	22
Monaghan	1,567	1,759	1,999	2,319	432	240	32
<i>Ulster (part)</i>	<i>6,717</i>	<i>7,215</i>	<i>7,944</i>	<i>8,815</i>	<i>1,227</i>	<i>729</i>	<i>22</i>
TOTAL	174,847	179,926	191,219	200,799	16,372	11,293	12

*i.e. Transportable goods industries (excluding Bord na Móna and CIE) laundries and gasworks (excluding Local Authority).

TABLE 17: *Remuneration of Employees in Industry 1969 (£,000's)*

<i>County</i>	<i>Bord na Móna</i>	<i>CIE workshops</i>	<i>Other transportable goods industries</i>	<i>ESB</i>	<i>Total CIP</i>	<i>Total Industry</i>
Carlow	1	1	2,390	25	2,866	2,984
Dublin	265	3,157	78,084	6,801	121,967	133,357
Kildare	1,092	10	4,664	435	7,170	8,184
Kilkenny	11	6	2,901	23	4,051	4,695
Laois	257	8	1,021	593	2,503	3,208
Longford	322	23	362	68	1,353	1,529
Louth	1	86	9,976	382	11,964	12,712
Meath	83	—	1,888	128	3,029	4,970
Offaly	1,875	16	1,734	596	4,696	5,119
Westmeath	346	38	1,194	325	3,085	3,651
Wexford	—	6	2,322	58	3,345	4,589
Wicklow	1	108	2,549	94	3,544	5,649
<i>Leinster</i>	<i>4,256</i>	<i>3,359</i>	<i>109,086</i>	<i>9,530</i>	<i>169,575</i>	<i>190,646</i>
Clare	—	11	5,150	149	6,401	6,654
Cork	2	274	23,138	1,223	32,828	37,893
Kerry	31	49	3,373	586	5,159	6,530
Limerick	—	293	5,999	691	9,043	11,849
Tipperary	183	26	5,706	123	7,974	9,061
Waterford	1	74	5,123	490	7,239	8,703
<i>Munster</i>	<i>218</i>	<i>728</i>	<i>47,589</i>	<i>3,263</i>	<i>68,684</i>	<i>80,689</i>
Galway	124	78	3,067	42	5,640	6,966
Leitrim	1	3	264	48	657	867
Mayo	282	40	1,896	200	4,136	4,781
Roscommon	127	—	677	117	1,239	1,728
Sligo	2	24	1,554	384	2,622	2,948
<i>Connacht</i>	<i>536</i>	<i>146</i>	<i>7,448</i>	<i>791</i>	<i>14,294</i>	<i>17,290</i>
Cavan	2	2	1,517	80	2,226	2,612
Donegal	55	9	2,879	416	4,726	6,087
Monaghan	—	—	1,683	47	2,138	2,835
<i>Ulster (part)</i>	<i>57</i>	<i>11</i>	<i>6,079</i>	<i>543</i>	<i>9,090</i>	<i>11,527</i>
TOTAL	5,067	4,243	170,202	14,127	261,643	300,153

available on a county basis. Excluding building and construction, county averages of numbers at work in allocated industries* were available for 1968. The only official figures for numbers of persons engaged in industrial employment in 1969 were contained in the quarterly Industrial Production Inquiry† and related only to national employment in transportable goods industries. The simple average for the four quarters of 1969 was 203,750, which was approximately 9,660 higher than the published national CIP total for 1968. Growth in employment in the same industries in the three years 1965 to 1968 was not much greater, at 11,430.

The relatively large increase in employment in 1969 posed some problems for the county estimation of industrial employment. In the estimation of 1960 incomes in [3] the use of 1958 levels to distribute 1960 employment was found to be unsatisfactory. The total increase in jobs between 1958 and 1960 was of the same magnitude as that for the year 1969. Accordingly, a method using simple proportionate increase in employment would not appear to be appropriate. As an alternative, an attempt was made to collect additional information from fresh sources, i.e. the IDA, the County Development Teams, and in the case of Laois, the county development officer. The IDA information related to about two-thirds of the increase in employment in the period March 1966 and December 1969, but separate data were also available for 1969. This information was checked against the official estimates for 1966-68. In about one-third of the counties the IDA data and official data were fairly close for the period 1965-1968 even though the coverage was very different. In all cases, except Longford, the IDA data were lower than those supplied by the county development teams. The latter had a 100 per cent coverage for the five years 1965-1970 (including non CIP firms). The difference between the two sets of data was most marked in Mayo and the Ulster counties. Clearly the IDA county development teams and CSO differ considerably in their coverage and methods of collection. As a result of this exercise an investigation into the discrepancies is currently in progress. Meanwhile, for the purpose of estimating the 1969 increases in employment, it was decided to accept the IDA estimates for 1969, which cover 30 per cent of the increase, and to distribute the balance proportionate to the county's change in employment over the interval 1963-1968.‡

After numbers employed in each county had been estimated, there still remained the problem of deciding the appropriate rate of remuneration for each county. As mentioned earlier, the most recent data on county remuneration related to 1963. In the absence of evidence to the contrary it was assumed that the pattern was unchanged and the figures weighted accordingly. If instead all

*In passing it should be noted that the transfer of a major company to Cork from Dublin in 1965 had a considerable impact on the estimates of employment in these counties in 1969.

†*Irish Statistical Bulletin*, Dec. 1970, p. 307.

‡Transportable goods industries (excluding Bord na Móna and CIE) laundries and gasworks (excluding Local Authority).

counties were given equal weights, remuneration in the designated areas would increase at the expense of the more prosperous counties.

The above allocations related to transportable goods industries exclusive of Bord na Móna and the CIE workshops. For these latter, statements for 1969 were supplied by the companies concerned and adjusted in the same manner as in the 1965 calculations. For non-transportable goods industries, the county distributions of remuneration in the ESB and in the maintenance of the CIE permanent way were calculated from returns by these companies. For the other CIP industries and services the 1965 distributions were assumed to apply. A similar assumption was made in the case of non-CIP industries and for wages paid in connection with work on the improvement of estates by the Department of Lands.

Employee Remuneration in Other Sectors (Table 18)

Distribution, Transport and Communications

As mentioned earlier, CIE provided a statement of employee remuneration in 1969 which was used to allocate county incomes from this source. This sector also contains eight other subsectors, e.g. retail trade, shipping, etc.* In the absence of evidence to the contrary, the 1965 pattern of remuneration in each subsector was assumed to persist and county allocations were made for the eight categories separately. In the case of the Post Office, the Department of Posts and Telegraphs reported no significant changes in county distributions. In national accounting conventions RTE is no longer included in this sector, having been transferred to the *Other Domestic* sector.

Public Administration and Defence

Excellent records of employee remuneration paid by Local Authorities were available for 1968 and these were grossed up to the 1969 level. The results were allocated to the various sectors assuming the 1965 county distributions.

In allocating the remuneration of employees of the Central Government, payments to the employees of the Department of Justice and Defence were calculated on the basis of returns for 1969 supplied by these Departments. The relevant votes in the Government's Appropriation Accounts were 20 to 24 inclusive, Votes 43 and 44 and parts of Votes 50 and 51. The allocation of remuneration of the Army and Gardai was complicated by the changes in county deployment of employees following the riots in Derry. The allocation was made on the basis of the county where the person concerned spent most of the year. In all other cases the allocation was made on a vote-by-vote basis assuming the same pattern as in 1965.

*See [3], p. 77 *et seq.*

TABLE 18: Remuneration of Employees in Other Sectors 1969 (£000's)

County	Distribu- tion	Transport	Communi- cations	Public Administra- tion and Defence	Education	Other Domestic excluding Education	Total
Carlow	743	166	121	235	396	1,317	2,978
Dublin	45,607	23,919	6,078	34,485	12,799	58,943	181,831
Kildare	1,089	198	229	3,176	865	1,943	7,500
Kilkenny	862	166	184	652	758	2,092	4,714
Laois	574	136	158	481	415	1,349	3,113
Longford	401	85	107	340	306	731	1,970
Louth	1,948	1,057	237	835	823	2,847	7,747
Meath	901	211	197	561	796	2,014	4,680
Offaly	896	186	189	549	559	1,263	3,642
Westmeath	960	373	225	1,751	708	2,095	6,112
Wexford	1,696	553	357	776	866	2,979	7,227
Wicklow	1,384	409	243	522	682	2,610	5,850
<i>Leinster</i>	<i>57,061</i>	<i>27,459</i>	<i>8,324</i>	<i>44,363</i>	<i>19,974</i>	<i>80,180</i>	<i>237,361</i>
Clare	1,661	522	427	1,281	865	2,150	6,411
Cork	9,765	4,497	1,392	6,951	4,647	14,052	41,304
Kerry	1,650	609	444	1,315	1,391	3,334	8,743
Limerick	3,649	2,039	479	3,026	1,948	5,341	16,482
Tipperary	2,186	444	486	2,360	1,760	3,907	11,143
Waterford	1,969	1,251	266	1,107	978	3,271	8,842
<i>Munster</i>	<i>20,385</i>	<i>9,362</i>	<i>3,495</i>	<i>16,041</i>	<i>11,588</i>	<i>32,055</i>	<i>92,926</i>
Galway	2,147	913	556	2,814	2,213	5,404	14,047
Leitrim	334	75	138	398	377	641	1,963
Mayo	1,377	466	450	1,368	1,392	2,736	7,789
Roscommon	636	101	236	1,161	712	1,111	3,957
Sligo	1,076	418	226	710	620	1,761	4,811
<i>Connacht</i>	<i>5,570</i>	<i>1,973</i>	<i>1,607</i>	<i>6,451</i>	<i>5,314</i>	<i>11,653</i>	<i>32,568</i>
Cavan	729	54	234	768	687	1,353	3,825
Donegal	1,543	285	413	1,388	1,372	2,695	7,696
Monaghan	738	41	194	542	603	1,433	3,551
<i>Ulster (part)</i>	<i>3,011</i>	<i>380</i>	<i>841</i>	<i>2,698</i>	<i>2,662</i>	<i>5,481</i>	<i>15,073</i>
TOTAL	86,027	39,174	14,267	69,552	39,573	129,369	377,928

Other Domestic

Somewhat more up-to-date data were available for education than for most other segments of this sector. Accurate data were available for payments to individual universities, and these were distributed to their respective hinterlands as in 1965. Secondary schools were assumed to follow the same pattern as previously. To maintain continuity with previous estimates, vocational teachers' earnings were allocated on the basis of the 1968 *Returns of Local Taxation*, even though an alternative distribution for 1968 was available from the Department of Education (i.e. number of teaching hours by vocational teachers employed

on 31 August 1968). The Department also provided a census of primary school teachers in special schools and other national schools for the year 1967-68. It was assumed that the rate of change in the number of primary teachers between 1965 and 1967 continued over the succeeding two years. This assumption led to increases in teachers in Leinster generally, (except for Carlow and Meath), and also in Cork and Monaghan. It meant a fall in other counties which was especially severe in Sligo and, to a much lesser extent, in Cavan, Leitrim and Donegal. The projected number of primary teachers was used to allocate remuneration in primary education. In the case of Cavan and Donegal the fall in remuneration due to fewer primary teachers was partly compensated for by payments to the new comprehensive schools, which were not in existence in 1965. Comprehensive schools also contributed to income in Galway and Clare. Another new element in the NIE calculations for this sector since 1965 consisted of remuneration of staff in reformatories. The *remainder of education*, which includes private tuition, was distributed as in 1965.

As mentioned above, RTE is now officially part of this sector. Remuneration in 1969 was allocated with the assistance of the chief accountant of that body. Similar assistance was obtained from An Foras Talúntais, the Dublin District Milk Board and the Inland Fisheries Trust. Apart from these the remaining twenty odd categories of employment* in the *other domestic* sector were allocated individually, assuming the same pattern as in 1965. In the case of one, the commercial banks, this procedure was deemed by a spokesman for the banks to be a reasonable approximation of the true position. In other instances, e.g. private domestic service and the professions, no simple means of verification was available.

Transfer Payments

Education

Data were sufficiently detailed to enable transfer payments for University education to be allocated directly to the counties in which the College is located. This was not the case for secondary education where the introduction of free education has resulted in a rise of approximately 140 per cent in expenditure. In spite of this substantial growth in expenditure the 1965 pattern was assumed to hold. By far the major constituent of transfers involving scholarships and prizes are the Local Authority scholarships. Data on these, available for 1968, showed a very similar pattern to that obtaining in 1965, and all scholarships and prizes were allocated on this basis.

The remaining educational transfers were allocated separately. The 1965 distribution was applied to transfers to reformatory and industrial schools, private agricultural schools, colleges providing courses in Irish, training colleges and to payments for the training of teachers and under section 109 of

*See [3] p. 91 *et seq.*

TABLE 19: *Transfer Payments 1969 (£000's)*

<i>County</i>	<i>Education</i>	<i>Social Welfare*</i>	<i>Other</i>	<i>Total</i>
Carlow	199	1,123	24	1,347
Dublin	8,373	23,610	1,220	33,203
Kildare	412	1,776	38	2,226
Kilkenny	268	1,829	45	2,142
Laois	197	1,338	24	1,558
Longford	168	1,216	49	1,432
Louth	360	2,456	46	2,863
Meath	306	1,942	30	2,278
Offaly	175	1,605	37	1,818
Westmeath	359	1,875	37	2,271
Wexford	300	2,918	52	3,271
Wicklow	238	1,902	46	2,186
<i>Leinster</i>	<i>11,356</i>	<i>43,591</i>	<i>1,647</i>	<i>56,595</i>
Clare	328	2,454	101	2,883
Cork	2,842	10,988	275	14,105
Kerry	594	4,673	204	5,471
Limerick	946	4,453	91	5,490
Tipperary	871	3,976	89	4,936
Waterford	427	2,348	45	2,820
<i>Munster</i>	<i>6,008</i>	<i>28,892</i>	<i>805</i>	<i>35,705</i>
Galway	1,546	5,279	138	6,962
Leitrim	122	1,469	53	1,643
Mayo	574	5,381	95	6,050
Roscommon	224	2,078	43	2,346
Sligo	232	1,818	46	2,095
<i>Connacht</i>	<i>2,697</i>	<i>16,025</i>	<i>375</i>	<i>19,097</i>
Cavan	150	1,833	37	2,020
Donegal	359	5,141	103	5,603
Monaghan	232	1,489	32	1,753
<i>Ulster (part)</i>	<i>741</i>	<i>8,463</i>	<i>172</i>	<i>9,376</i>
TOTAL	20,802	96,971	2,999	120,772

*Social Welfare includes maintenance allowances to persons suffering from infectious diseases, rehabilitation and maintenance of disabled persons and grants to Hospitals' Trust Fund for voluntary hospitals.

the Vocational Education Act. Transfers to Muintir na Tire, Macra na Tuaithe, the Catholic Workers' College, the Institute of Advanced Studies and the Chester Beatty Library were allocated to the county where the headquarters of the organisation is situated. *Scientific research grants to students*, payments for *educational research* and *grants to the Union of Students in Ireland* were allocated with the help of the Department of Education while *deontais chun cabhru le daltaí Gaeltachta* was allocated with the assistance of Roinn na Gaeltachta. The *provision of free books to necessitous children* was allocated proportionate to salaries in primary education and the small balance of unallocated items distributed in proportion to total transfers for education.

Social Welfare

The Department of Social Welfare provided data on childrens' allowances by four major areas in 1969. These payments were distributed within each area preserving the 1965 ratios. In addition, payments of unemployment benefit and unemployment assistance made at Local Offices in the year 1969/70 were furnished in the usual detail. Payments by offices at or near county boundaries were allocated on the same basis as in 1965. *Home Assistance, maintenance allowances to persons suffering from infectious diseases, and rehabilitation and maintenance of disabled persons* were allocated proportionate to the net payments published in the *Returns of Local Taxation* for 1968. For the remaining items in force in 1965 (e.g. old age and widows' pensions) the distribution of that year was assumed to be still appropriate.

However, there were also a number of new items of expenditure under the general heading of Social Assistance. Payments under the *Redundancy Payments Act 1967*, amounting to almost three-quarters of a million pounds, were distributed with the help of the Department of Labour. The distributor used was the number of new cases reported during the year. No attempt was made to weight the payments. Another new item was payments from the occupational injuries fund, which exceeded a million pounds. These were allocated with the help of the Department of Social Welfare. On the advice of the same Department, payments to the Hospitals Trust Fund for grants towards deficits of voluntary hospitals (£2.75 million) were allocated proportionate to the number of user bed-days reported in 1968 in the *Statistics of Participating Voluntary Hospitals*. Free allowances for travel, radio and television licenses, etc. were distributed proportionate to other payments made to the class of beneficiaries concerned, (e.g. old age pensioners, pensioned veterans of the War of Independence). Finally extra-statutory grants were allocated proportionate to other payments in the sections to which they referred—children's allowances, old age pensions, etc.

Other Transfer Payments

As in 1965, the other transfer payments made by the Central Government cover a wide variety of expenditures. For many of these the payment was

allocated to the headquarters of the organisation benefiting from the payment as was the practice for 1965. This is not entirely satisfactory. For example, the payment of £108,000 to voluntary youth organisations—a new item since 1965—meant allocating to Dublin payments to such organisations as the *Irish Amateur Swimming Association* and the *Irish Yachting Association*, while payments to the *National Federation of Catholic Youth Clubs* were allocated to Kilkenny, in accordance with the residences of the secretaries of these organisations. This does not indicate the area of residence of the ultimate beneficiaries. In the previous publication this point was also made in connection with University tuition and Gaeltacht holidays. Students at Universities are normally resident nearby, and the transfer can reasonably be associated with the location of the University in preference to the home address of the student's family. Where sporting organisations are concerned this seems less valid, but the sums involved are usually too small to warrant a detailed study in an exercise such as the present one. Transfer payments under the Farm Apprenticeship Scheme, on the other hand, were allocated to the county of the apprentice, not to the Dublin Headquarters of the Board.

Some of the items of expenditure were allocated with the assistance of the Department concerned e.g. *Deontais d'Eagrais Airithe Seirbhisi ilgnéitheacha*—Roinn na Gaeltachta; *Language Research*—Department of Education, *Game and Wild Life Development*—Department of Lands. Others were allocated as in 1965—*Pensions to veterans of the war of independence*, grants to *Tuismitheoiri no caomhnoiri daltai airithe arb i an Ghaeilge gnath-teanga an teaghlaigh acu*, payments for fuel for necessitous families, footwear for certain necessitous children, etc. Others were available for 1968 in published sources—*State aided schemes* in the *Returns of Local Taxation*. Others were omitted as involving payments outside the State e.g. *Educational Research by Unesco*, *Northern Ireland Relief*. The balance unallocated was distributed as with Social Welfare payments in general.

Other Personal Income (Table 20)

The remaining items were almost all allocated in proportion to 1965 figures. In allocating the *Income of Independent Traders* separate estimates were made for hotels, laundries, lodgings, clubs, hairdressers, entertainment, professions, education and others. For rental income the *Quarterly Bulletin of Housing Statistics* was used to calculate the increase in dwellings in each area, and the results applied to the 1965 estimates of housing to obtain a distributor for 1969. No adjustment was made to the county distribution of interest, dividends, pensions from abroad or emigrants' remittances.

The Results (Table 1)

The results of the calculations described are presented in the tables which follow at the end of this section, and are summarised in Table 1 in Part 1 of this paper. As will be clear from the discussion so far, the results in several instances must be regarded as less authoritative than those for 1960 and 1965 published

TABLE 20: *Other Income 1969 (£000's)*

<i>County</i>	<i>Income of self-employed outside agriculture</i>	<i>Interest Dividends and Rent</i>	<i>Emigrants' Remittances and Pensions</i>	<i>Total other Income</i>
Carlow	767	1,250	317	2,334
Dublin	26,202	69,972	5,692	101,866
Kildare	1,630	3,143	407	5,180
Kilkenny	1,315	1,787	425	3,527
Laois	862	940	224	2,026
Longford	611	601	496	1,708
Louth	1,843	2,737	630	5,210
Meath	1,372	2,136	378	3,886
Offaly	1,035	1,259	420	2,714
Westmeath	1,232	1,284	540	3,056
Wexford	1,882	2,694	724	5,300
Wicklow	1,821	3,782	593	6,196
<i>Leinster</i>	<i>40,571</i>	<i>91,583</i>	<i>10,847</i>	<i>143,001</i>
Clare	1,618	1,745	841	4,204
Cork	8,139	13,583	4,182	25,904
Kerry	2,400	2,294	1,596	6,290
Limerick	3,308	4,958	1,762	10,028
Tipperary	2,989	3,811	1,145	7,945
Waterford	1,894	2,562	755	5,211
<i>Munster</i>	<i>20,347</i>	<i>28,954</i>	<i>10,280</i>	<i>59,581</i>
Galway	3,502	3,485	1,894	8,881
Leitrim	461	455	367	1,283
Mayo	2,103	2,368	2,987	7,458
Roscommon	880	1,251	827	2,958
Sligo	1,114	1,116	641	2,871
<i>Connacht</i>	<i>8,060</i>	<i>8,676</i>	<i>6,716</i>	<i>23,452</i>
Cavan	1,035	1,027	742	2,804
Donegal	2,102	2,628	1,917	6,647
Monaghan	885	1,135	498	2,518
<i>Ulster (part)</i>	<i>4,022</i>	<i>4,790</i>	<i>3,157</i>	<i>11,969</i>
TOTAL	73,000	134,003	31,000	238,003

earlier and updated in the next section of this paper. However, it is felt that for many purposes up-to-date figures are of sufficient value to more than offset some inevitable loss of accuracy due to data gaps. In any case, it seems fair to claim that the 1969 results presented here are considerably more accurate than could be obtained from a simple rounding up of the 1965 county distribution on the basis of the 1969 National Accounts.

B. The Methodology of the Revised Estimates for 1960 and 1965

Revision of Income Estimates

The first part of this paper presents the revised estimates of personal incomes by county for 1960 and 1965, which incorporate the revisions in the NIE totals published in the last two years. Advantage is taken of the revisions to improve the accuracy of the estimates in a few cases. The only major changes in methodology relate to the manner in which income is estimated in the Distribution sector and the way in which *per capita* incomes are calculated.

Since the calculation of *Personal Incomes by County 1965* [1] data relating to retail trade have been published from the *Census of Distribution 1966*. With data for retail trade available for 1956 and 1966, a new approach was clearly called for. However, before this data could provide reasonable estimates for 1960 and 1965, it was necessary to correct for non-response. This requires evolving a satisfactory method for distributing the national and provincial estimates of non-response on a county basis.

TABLE 21: *Area Totals for Retail Trade 1956, Incorporating Estimates of Non-Response (in brackets)*

	<i>Establishments Nos.</i>	<i>Sales £ million</i>	<i>Wages</i>	<i>Personnel Engaged thousands</i>
State	40,913 (7,454)	269.21 (25.86)	20.06 (1.76)	123.6 (13.4)
Dublin and				
Dún Laoghaire	7,002 (1,568)	93.54 (6.63)	8.98 (0.51)	33.6 (2.7)
Rest of Leinster	9,167 (1,682)	58.66 (7.83)	3.78 (0.53)	27.5 (3.6)
Munster	14,808 (2,488)	72.36 (6.62)	4.93 (0.45)	38.7 (4.1)
Connacht/Ulster	9,936 (1,716)	44.64 (4.78)	2.37 (0.26)	23.8 (2.9)

Based on Tables 1A and XXVII *Census of Distribution 1956-1959*.

Table 21 gives these estimates for 1956. Three options are available for correcting the county figures of wages for non-response: one, allocate the provincial estimates of non-response proportionately to the number of establishments which provided no returns in each county; two, assume the non-responding establishments paid the average wages of those which responded in each county,

and use the county figures for all establishments as a distributor; and three, assume the same wages paid by respondents and non-respondents within a county, and use the weighed county estimates of non-respondents to distribute the estimate for non-response. The last of these methods is the method used in both years. The county estimates for non-response have been added to the actual results from those firms which supplied returns.

Estimates for 1960 and 1965 are derived by interpolation between the 1956 and 1966 *Censuses of Distribution*. It should be noted in passing that the 1966 employment figures, grossed up for non-response on a county basis, shed some light on intercounty commuters engaged in the retail trade, since they relate to the year in which the *Census of Population* was taken. They do, however, suffer from the other difficulties of relatives assisting, part-time workers, etc. referred to in [3].

Data made available from the 1966 *Census of Distribution* (CD) on the wholesale trade enables the county estimates to be calculated afresh. In the 1956 CD, no provincial data was available and the only territorial subdivision distinguished Dublin-Dún Laoghaire, the three Munster cities and the remainder of the State. The new provincial data for 1966 permit provincial estimates to be calculated for 1960 and 1965, to supplement the estimates for these three areas. The results are part of the revisions currently reported.

Other revisions of county totals are relatively minor ones, such as the transfer of RTE to the *Other Domestic* sector from *Distribution, Transport and Communications*, the adjustment of totals in the light of fresh information available at national level and used to adjust NIE totals, etc. The revised county totals for 1960 and 1965 are presented in Tables 2 and 3 in Part I of this paper.

Per Capita Incomes

Another major revision relates to *per capita* incomes. In [3], *per capita* incomes were obtained by applying the population at the nearest Census date to the county income estimates. The present paper follows the practice of Attwood and Geary [2], obtaining county populations for June 1960 and 1965 by linear interpolation of the numbers reported in April 1956, 1961 and 1966. Tables 7 and 8 in Part I give the results. These are comparable with the estimated county populations for 1969 obtained by interpolating from the *Census of Population* for 1966 and 1971.

PART III: INCOME ARISING WITHIN COUNTIES 1960 and 1965

Introduction

In Part I of this paper estimates of the *personal incomes* enjoyed by residents in each county in the Republic are presented for each of the years 1960, 1965 and 1969. This section supplements that information with estimates of *income arising* within these counties in 1960 and 1965. Insufficient data were available for 1969 to enable similar calculations to be made for that year with any degree of confidence.

Income arising can be conceived as analogous to earned income, while *personal income* is the income receivable by households from all sources, whether earned or not. Clearly personal income is an important statistic for studies of market potential, local government finance, migration patterns, etc., and as such is keenly sought after by commercial firms engaged in market research, by those charged with regional developments and many others in these lines of work. However, for many other purposes income arising is preferred, providing, as it does, a closer measure of the county's ability to stand on its own feet economically.

Income arising was previously estimated for 1960 in the pioneering work of Attwood and Geary [2]. However, as has been amply documented in [3] the author's approach to income estimation differs from that of Attwood and Geary, both in the degree of detail employed and in the conceptual approach to the estimation procedure itself. In the Attwood-Geary study income arising from economic activities within the county was estimated first, and from this were derived estimates of personal income enjoyed by residents of that county. In the 1965 and current studies personal incomes were estimated initially and income arising derived from these. This is not simply a matter of reversing the Attwood-Geary procedures. Several conceptual differences are involved.

For convenience the national aggregates which comprise *personal income* are set out in Table 22.

Comparison between tables 22 and 23 shows that, with the exception of the foreign sources of employee remuneration (i.e. item 4, Table 22), the totals for remuneration of employees and income of independent traders are identical. These common items account over 85 per cent of all income arising nationally. The sources of "other income" are different. The simplest approach therefore, to the estimation of income arising in each county would appear to be

- (a) Examine the basis on which the county distributions of the common items have been allocated for personal income purposes to check whether it is appropriate for income arising purposes.
- (b) Calculate the distribution of the remaining items directly.

TABLE 22: *Constituent Elements of Personal Income (The "Direct" Approach)*

	£ million	
	1960	1965
<i>Remuneration of Employees</i>		
1. Agriculture, etc.	16.9	19.9
2. Domestic non-agriculture	272.2	444.3
3. Employer's contribution to social insurance	3.6	8.1
4. Foreign	5.2	7.0
<i>Income of Independent Traders, etc.</i>		
5. Agriculture, etc.	113.3	143.2
6. Non-agriculture	39.9	57.0
<i>Other Income</i>		
7. Interest, dividends and rents paid to households and private non-profit institutions.	60.6	88.3
8. Current transfers from public authorities (except national debt interest)	39.6	66.8
9. Emigrants, remittances	13.0	14.1
Personal income of households and private non-profit institutions.	564.3	848.7

Source: NIE 1969, Table 14.

The corresponding table for *income arising* domestically is presented in Table 23.

TABLE 23: *Constituent Elements of Income Arising (The "Direct" Approach)*

	£ million	
	1960	1965
<i>Remuneration of Employees</i>		
1. Agriculture, etc.	16.9	19.9
2. Domestic non-agriculture	272.2	444.3
3. Employers contribution to social insurance	3.6	8.1
<i>Income of self-employed</i>		
4. Agriculture	113.3	143.2
5. Non-Agriculture*	39.9	57.0
<i>Other Income</i>		
6. Profits of companies and income of the Post Office	55.9	84.1
7. Rent	18.0	20.8
Total Income Arising	519.8	777.4

*Called "other trading profits, professional earnings etc." in NIE Table A2.

The Common Items

Agricultural Income

The income of farmers and farm workers is based on estimates of revenue derived from sales within the county, less expenses occurred in production, and includes the value of a farmer's own produce consumed in his household. As such, it is income arising within the county. Since farmers reside near their farms, this income can also be regarded as personal income. Those farms which cross county boundaries would tend to have their residences randomly distributed on both sides of the county line. The only problem would appear to be the income of livestock traders, (2,873 persons in 1961), which to date has received scant attention from agricultural economists. Nationally, this income is part of agricultural income, but on a county basis the county where the income is enjoyed, may not coincide with the county in which it arose. In particular, there are proportionately more traders residing in county Dublin than the output of the county would warrant. However, generous assumptions about the income of these traders would not change *per capita* income greatly, and certainly not compared to the potential errors arising from the use of other distributors.

Other Self-employed

Personal income derived from self-employment in the professions, industry, retail distribution etc. is related to the area of residence of the self-employed persons, as set out in the Census of Population. This category is composed predominantly of such persons as shopkeepers, members of religious communities engaged in teaching, doctors etc. who, it is reasonable to assume, live close to their work. Small entrepreneurs are also likely to be employed locally—tailors, cobblers etc. The only difficulty might be posed by professional people commuting into Dublin. This might be balanced, however, by professional people in Dublin undertaking work outside the county. The difficulty of deciding where income arises for such people as a Dublin barrister on circuit in the Midlands illustrates the greater difficulty in estimating income arising compared to personal income. In general it was assumed that even if these incomes could be quantified on a county basis they would be unlikely to change the picture greatly.

Employees outside agriculture

Much of the information on the employment of non-agricultural workers was based on returns from the Census of Industrial Production and the Census of Distribution, which allocated employees to the county in which the establishment was located. The balance of employment, not covered by these Censuses, was estimated as the difference between these totals and the Census of Population. Since in the case of Carlow and Clare these balances were negative, the final county figures were obviously estimates of employees resident in the

county and, therefore, related to personal income estimation rather than to income arising. There are no estimates published of the total numbers employed in a county, much less the total income arising from such employment. However, such checks as can be made, indicate that the differences between the numbers of workers employed and workers resident in any county are relatively small, even in the case of Dublin and Carlow which suffer most from assuming the two aggregates have the same values.

The items specific to "income arising"

Company Profits

In the NIE accounts the item, designated *Trading profits of companies (including all corporate bodies) before tax*, refers to domestic profits arising from economic activity within the State. As such, it includes the activities of foreign companies operating within the State and excludes the income of Irish concerns derived from activities abroad.*

There is a conceptual problem related to the assignment of company profits. Where do these profits arise? Is it proper to assume that the profits of ESB (if any) arise at the head office rather than at the places where current is generated or where current is consumed: or in the case of Bord na Móna, where the turf is cut or where it is sold? Would it have been more consistent to assign the *other income* of a commercial bank, whose head office was in New York, to outside the State. If not, then a case can be made for assigning the other income of banks to each county in proportion to the banking business done in the county, if this information were available. In general in this paper, county employment in a sector or Company is taken as an index of its level of business in a county, and has been used to distribute the *other income* of those companies whose activities spread over a large part of the Republic.

In the discussion of company profits a sectoral approach is adopted. Table A.2 of the NIE 1969 gives the net national produce (national income) at factor cost by sector of origin. That table distinguishes *remuneration of employees* from *other income* in four major sectors, so that *other income* is the sum of company profits and income of self employed. Now the income of self-employed has already been calculated by sector in the estimation of personal incomes (cf. Table 1). Therefore, by deduction, the company profits arising in each sector can be estimated.

*The rest of the definition in the NIE reports is "Trading profits includes not only those of public and private companies but also the operating profits of certain corporate bodies, such as the ESB, CIE, Bord na Móna, the Central Bank, the Post Office, etc. In the case of the Post Office this income is taken as the provision for interest charges; in that of the Post Office Savings Bank it is reckoned as the excess of investment income received over interest credited to depositors, less management expenses. When computing the profits of commercial banks the excess of income and dividends received over payments to depositors is regarded as a charge made for services to customers. In all other cases the trading profits are arrived at after payment of indirect (but not direct) taxes. It includes interest payments and rents due to others and, therefore, to avoid double counting, excludes the corresponding payments receivable by the firm."

TABLE 24: *Composition of "Other Income" in the Domestic Non-Agricultural Economy*

Sector of Origin	1960	1965
1. Industry	37.7	54.3
2. Distribution, Transport and Communication	28.5	43.7
3. Other Domestic (excluding rent)	29.6	43.1
	<hr/>	<hr/>
	95.8	141.1
	<hr/>	<hr/>
of which:—		
4. Trading profits	53.8	79.2
5. Income of Post Office, etc.	2.1	4.9
6. Income of self-employed	39.9	57.0
	<hr/>	<hr/>
	95.8	141.1

Industry

The *other income* of firms not covered by the CIP distinguishes manufacturing firms from those engaged in building and construction. From the *Censuses of Population* those industries which contain a large proportion of self-employed can be identified, e.g. tailors, blacksmiths, carpenters, etc. The *other income* of these industries is assumed to be *income from self-employment* rather than *trading profits*.

In the case of CIP firms, the profits of Bord na Móna and the ESB were allocated separately, taking county of employment as an index of business. The profits of other CIP firms were distributed in proportion to the *remainder of net output*, as obtained from the CIP of the relevant year.

Distribution, Transport and Communications

The allocation of *other income* from distribution was based on the net margins in retail trade, calculated from the *Census of Distribution*. Earlier, when personal incomes were being calculated, the income of self-employed in retail trading was based on the net margins returned for unincorporated firms in retailing in the 1956 *Census of Distribution* and a similar figure evolved for the wholesale trade. Now, for income arising purposes, the corresponding figures have also been estimated for companies on a similar basis. These estimates for 1956 formed the basis for both the 1960 and 1965 figures.

In transport, the income of self-employed was attributed exclusively to private hauliers and taximen. Company profits comprised, in the main, the other income of CIE, the Airlines, Irish Shipping and B+I. For CIE employment was taken as an index of business. For the airlines income was distributed to Dublin, Clare and Cork based on the relative numbers of passengers handled at each airport. Similar criteria were employed to dis-

tribute income from shipping to the counties with sizable ports, *viz.* Louth, Dublin, Wicklow, Wexford, Waterford, Cork and Galway. In communications the income of the Post Office was distributed in proportion to the employment given in each county.

Other Domestic

This sector comprises many subsectors, of which the first is banking and finance. The income of the Central Bank was allocated exclusively to Dublin, but that of the Post Office Savings Bank was allocated to counties, using numbers employed as an index of business. Estimates of the *other income* of commercial banks, insurance companies, building societies and hire purchase companies had to be made since no national figures were available. The results obtained were distributed using as a distributor the appropriate industrial code in the Census of Population—*banking insurance or other finance*. The income of self-employed persons engaged in accountancy, insurance and finance, house auctioneering and advertising had already been estimated nationally and distributed by county when estimating personal income. These figures were also used for the income arising calculations.

Another sub-sector consisted of hotels and restaurants, lodgings and boarding houses, hairdressing establishments, undertakers, clubs, charities, entertainment and sport. The income derived from self-employment in these industries had already been calculated in detail. This needed to be supplemented by the income of companies engaged in the running of hotels, cinemas and theatres which were deemed to be the main areas of company activity in this sub-section. The returns of Bord Fáilte provided sufficient information to develop a county distribution of company-owned hotel rooms of different grades. These grades were allocated their share of the county's total bed-nights so as to achieve the national estimate for company-owned hotels.

The 1956 Census of Distribution provided information on company ownership of cinemas and theatres. The data for the county boroughs could be allocated directly. The remainder was distributed to towns of over 5,000 population in proportion to their populations. The income of the Hospitals Trust was attributed to Dublin while that of RTE was distributed proportionate to employment in different counties.

The remaining subsectors were assumed to contain no companies. *Other income* in education arises from the "self-employment" of members of religious communities. The profits of professional people also arise for the most part from self-employment. Thus for these sub-sectors income arising is taken to be the same as personal income, and the method of calculation is that described in [3].

Rents

Land Annuities contain subsidy and rent components. Of these only the former enters personal income while both enter income arising. These items

are simple to allocate since the Department of Lands have very good information on this on a county basis.

Personal income also includes an item for the net income derived from the ownership of dwellings. This consists of the gross receipts of rent for rented dwellings plus an imputed rent for dwellings which are owner-occupied, less deductions for depreciation, rates, repairs and maintenance. In the case of owner-occupied dwellings the county where the rent arises and where it is enjoyed would be the same. The income from Local Authority housing includes both the actual rent paid and the calculated subsidy on these dwellings, less depreciation and other current expenses. Only the subsidy element enters personal income while the entire amount enters income arising. No problems of allocation arise since the national estimate is based on *loan charges* on housing accounts in the *Returns of Local Taxation*, for which county details are published. *Other rented dwellings* may be owned by residents of another county. In the absence of evidence to the contrary it is assumed that rent flows between counties would tend to cancel each other out. This means that the estimates used for personal income purposes can be allowed to stand.

An Alternative Methodology—the Attwood-Geary approach

The Attwood-Geary report on county incomes for 1960 also estimated income arising directly using a sectoral breakdown. The major differences between the Attwood-Geary and Ross approaches in the allocation of agricultural and employee incomes are outlined in [3]. In allocating *other income*, income from self-employment and company profits were not separately identified in the Attwood-Geary paper except in the case of the professions and education. A brief recapitulation of their methodology will serve to highlight other differences in the two approaches.

Other income derived from *industry*, was allocated in proportion to the GIP remainder of net output, whether it was trading profits of companies or the income of self-employed. Exceptions were the incomes of Bord na Móna, CIE, and ESB which were allocated to Dublin. The 1956 Census of Distribution figures for net margins in retail distribution were adjusted for non-response and used to distribute *other income* from all distribution. Apart from CIE income attributed to Dublin, other income in transport was distributed on the basis of the *other transport* industry in the 1951 *Census of Population* weighted by an arbitrary loading factor. *Other income* in communications was attributed entirely to Dublin.

In the *other domestic* sector the income of banks were allocated to Dublin and Cork; while those of the Post Office Savings Bank, the Central Bank and the Hospitals Trust were allocated to Dublin alone. For the remainder of *finance* the numbers at work in 1951 in *insurance* and *other finance* apart from banking were weighted and used as distributors. In education the Attwood-Geary distributor was numbers at work in 1951 in education (excluding

Government and Local Authority employment). Similar distributors (numbers at work in the professions and in personal service, excluding domestic service in 1961) were used to allocate, respectively, aggregate income derived from the professions, and the aggregate income from hotels, restaurants, lodging and boarding houses, hairdressing establishments, undertakers, clubs, charities, entertainment and sport.

For land annuities the Attwood-Geary study used the rates payable on agricultural land as a distributor. The distributor for rents of dwellings was more complex since these authors did not have the benefit of the 1961 CP volume on housing and were forced to update the results published in the 1946 CP. From this they extracted the average rent per dwelling and the number of dwellings in each county. They adjusted the latter by the change, in population reported between 1946 and 1961. The product of these three factors gave them their distributor for 1960 net rental income.

Comparison of Attwood-Geary and Ross Estimates for 1960

From this brief outline it will be clear that there were several differences between the Attwood-Geary and Ross approaches. Some of these were conceptual; e.g. allocation of *other income* to head offices as opposed to distributing it by an index of business done, the allocation of *other income* by one distributor, rather than by two which distinguished company profits from the income of self-employed persons. Others related to data. Attwood-Geary were forced to use the 1951 *Census of Population* while Ross had the 1961 Census available. They based their estimates on NIE estimates which were subsequently revised. Yet others related to detail, e.g. where Attwood-Geary distributed all finance at once, Ross calculated separate distributions for the component elements of this industry. In view of these differences it is not surprising that the estimates of income arising differ. What is surprising is that for the most part they differ comparatively little. At the end of this section tables 25 and 27 set out the estimates for 1960 made by both Attwood-Geary and Ross as well as the Ross estimates for 1965. In thirteen cases the Attwood-Geary and Ross estimates do not differ by more than 3 per cent and only in seven cases were the differences greater than 5 per cent. It should be noted in passing that the national totals themselves differ by over 1 per cent from one NIE report to another.

While the causes of these divergences between counties is usually an accumulation of small differences, the seven counties for which the Attwood-Geary estimates showed divergences from the Ross estimates of over 5 per cent are worth examining briefly. The counties concerned were Longford (—8 per cent), Meath (+6 per cent), Louth (—9 per cent), Wexford (—5 per cent), Clare (—15 per cent), Kerry (—10 per cent), and Cavan (—6 per cent). Differences in Longford, Meath and Cavan largely arose through differences in the methodology used to calculate cattle output. These are explained in detail in [3], and largely involve a different treatment of inventory

changes. This also accounted for a considerable part of the differences in Kerry and Wexford. In Clare over half the divergence can be attributed to differences in the estimation of income derived from industry. In the CIP 1958 returns for employment in transportable goods industries (excluding Bord na Móna and the CIE bus and rail workshops) and in building and construction, average employment in Clare was given as 1,101. In 1961 for the same industries CIP employment was 1,976. The Attwood-Geary calculations were based on 1958, those used by Ross on an interpolated estimate for 1960.

Similarly, the 1960 estimated* CIP showed that employment in Kerry since 1958 had risen three times as fast as the national rate of increase, so that estimates based on the 1958 CIP would tend to be too low. This, combined with the cattle adjustment, accounted for almost 70 per cent of the difference in the Kerry estimates. In Louth, the bulk of the difference arises from the differing methods and revised data used in calculating "other income". For industry, the Ross procedure increased the estimate for Louth by £453,000, or almost 40 per cent of the divergence. Louth's share in banking and CIE income previously allocated to Dublin amounted to a further £200,000, and so on. Apart from these, the total differences between the Attwood-Geary and Ross estimates would have been less than 1 per cent, (the magnitude of the revision in the national estimates).

*By interpolation between 1958 and 1961.

REFERENCES

- [1.] M. Ross, *Personal Income by County, 1965*. ESRI Paper No. 49, November 1969.
- [2.] E. A. Attwood and R. C. Geary, *Irish County Incomes in 1960*. ESRI Paper No. 16, September 1963.
- [3.] M. Ross, *Methodology of Personal Income Estimation by County*, ESRI Paper No. 63, July 1971.

TABLE 25: *Income Arising 1960—Attwood and Geary estimates (£000's) (in five main sectors distinguishing remuneration of employees and other income)*

County	Agriculture etc.		Industry		Distribution, Transport		Public Administration	Other Domestic		Total
	Remuneration	Other	Remuneration	Other	Remuneration	Other	Total	Remuneration	Other	
Carlow	496	1,877	1,313	273	370	228	351	557	278	5,743
Dublin	1,418	2,110	51,505	18,596	26,413	13,948	22,643	24,056	24,645	185,334
Kildare	998	3,450	3,065	813	576	371	1,585	1,058	538	12,454
Kilkenny	950	4,298	2,122	647	559	344	579	1,002	476	10,977
Laois	639	2,819	1,336	536	418	233	514	643	331	7,469
Longford	235	1,428	472	172	246	169	280	420	199	3,621
Louth	563	1,477	4,644	1,366	1,343	617	693	1,157	699	12,559
Meath	1,308	5,110	1,583	622	480	303	541	999	436	11,382
Offaly	507	2,555	2,580	519	499	308	438	686	348	8,440
Westmeath	516	2,485	1,221	373	677	318	1,302	814	445	8,151
Wexford	1,273	4,430	1,840	667	980	598	706	1,337	629	12,460
Wicklow	793	1,925	2,160	806	702	421	369	1,291	793	9,260
<i>Leinster</i>	<i>9,696</i>	<i>33,964</i>	<i>73,841</i>	<i>25,390</i>	<i>33,263</i>	<i>17,858</i>	<i>30,001</i>	<i>34,020</i>	<i>29,817</i>	<i>287,850</i>
Clare	476	4,711	978	300	403	408	917	925	505	9,623
Cork	2,708	14,984	14,528	4,507	6,049	3,062	3,848	6,679	4,531	60,896
Kerry	761	7,646	1,833	676	953	530	1,139	1,549	840	15,927
Limerick	1,224	6,645	4,198	1,571	2,546	1,255	2,003	2,343	1,309	23,094
Tipperary	1,615	8,430	3,828	1,177	1,203	772	1,322	1,913	942	21,202
Waterford	768	3,352	2,966	869	1,603	836	780	1,435	847	13,456
<i>Munster</i>	<i>7,552</i>	<i>45,768</i>	<i>28,331</i>	<i>9,100</i>	<i>12,757</i>	<i>6,863</i>	<i>10,009</i>	<i>14,844</i>	<i>8,974</i>	<i>144,198</i>
Galway	917	8,250	2,508	736	1,268	780	2,317	2,254	1,427	20,467
Leitrim	193	1,920	487	196	189	152	336	399	234	4,106
Mayo	636	6,120	1,798	552	804	578	1,195	1,412	1,033	14,128
Roscommon	335	3,885	796	218	322	246	661	744	466	7,678
Sligo	283	2,835	1,187	396	579	329	538	833	564	7,544
<i>Connacht</i>	<i>2,364</i>	<i>23,010</i>	<i>6,776</i>	<i>2,098</i>	<i>3,162</i>	<i>2,085</i>	<i>5,047</i>	<i>5,642</i>	<i>3,734</i>	<i>53,918</i>
Cavan	454	3,024	964	388	436	343	601	767	422	7,399
Donegal	881	4,318	2,478	927	932	656	1,090	1,680	740	13,702
Monaghan	353	2,216	910	397	450	295	652	747	413	6,433
<i>Ulster (part)</i>	<i>1,688</i>	<i>9,558</i>	<i>4,352</i>	<i>1,712</i>	<i>1,818</i>	<i>1,294</i>	<i>2,343</i>	<i>3,194</i>	<i>1,575</i>	<i>27,534</i>
Total	21,300	112,300	113,300	38,300	51,000	28,100	47,400	57,700	44,100	513,500

FURTHER DATA ON COUNTY INCOMES IN THE SIXTIES

TABLE 26: *Income Arising 1960—Ross Estimates (£,000's) (in five main sectors distinguishing remuneration of employees and other income)*

County	Agriculture etc.		Industry		Distribution, Transport		Other Domestic			Total
	Remuneration	Other	Remuneration	Other	Remuneration	Other	Public Administration	Remuneration	Other	
Carlow	427	1,699	1,266	280	443	276	147	647	369	5,554
Dublin	996	2,623	51,045	17,038	31,845	11,529	16,231	28,855	21,079	181,242
Kildare	844	2,890	2,704	971	681	460	1,707	1,155	704	12,116
Kilkenny	783	4,107	1,938	564	571	421	297	1,201	638	10,519
Laois	588	2,817	1,356	474	417	295	215	768	411	7,341
Longford	189	1,626	537	123	260	187	185	498	298	3,902
Louth	446	1,644	4,550	1,819	1,619	821	387	1,552	890	13,729
Meath	1,025	4,415	1,784	510	537	368	326	1,169	610	10,744
Offaly	386	2,691	2,410	662	555	402	282	779	513	8,678
Westmeath	413	2,331	1,324	407	747	424	948	1,145	575	8,313
Wexford	1,327	4,531	1,812	614	1,175	740	373	1,609	946	13,127
Wicklow	758	1,947	2,151	418	912	525	278	1,449	919	9,357
<i>Leinster</i>	<i>8,182</i>	<i>33,322</i>	<i>72,877</i>	<i>23,880</i>	<i>39,759</i>	<i>16,449</i>	<i>21,375</i>	<i>40,827</i>	<i>27,952</i>	<i>284,621</i>
Clare	364	4,993	1,444	503	644	611	544	1,225	725	11,051
Cork	2,262	15,635	15,136	5,327	7,141	3,142	2,211	8,017	4,790	63,660
Kerry	779	8,145	2,200	787	1,006	699	624	2,071	1,172	17,501
Limerick	1,217	6,871	4,377	1,494	2,808	1,412	1,318	2,796	1,742	24,035
Tipperary	1,468	8,167	3,777	1,149	1,349	985	831	2,293	1,479	21,498
Waterford	632	3,309	3,105	890	1,595	863	345	1,776	1,042	13,558
<i>Munster</i>	<i>6,722</i>	<i>47,120</i>	<i>30,060</i>	<i>10,150</i>	<i>14,544</i>	<i>7,712</i>	<i>5,873</i>	<i>18,177</i>	<i>10,950</i>	<i>151,304</i>
Galway	509	9,040	2,987	707	1,459	1,049	988	3,105	1,518	21,362
Leitrim	106	2,072	441	143	236	200	202	471	264	4,136
Mayo	239	6,522	1,823	590	913	754	584	1,822	1,023	14,268
Roscommon	160	4,106	769	205	392	305	453	804	502	7,605
Sligo	146	2,989	1,211	456	678	400	168	1,044	568	7,660
<i>Connacht</i>	<i>1,160</i>	<i>24,729</i>	<i>7,231</i>	<i>2,101</i>	<i>3,678</i>	<i>2,708</i>	<i>2,395</i>	<i>7,245</i>	<i>3,875</i>	<i>55,120</i>
Cavan	260	3,514	1,002	392	467	435	410	880	502	7,862
Donegal	598	4,915	2,400	854	944	849	595	2,115	961	14,230
Monaghan	184	2,596	941	324	459	355	341	954	466	6,620
<i>Ulster (part)</i>	<i>1,042</i>	<i>11,025</i>	<i>4,343</i>	<i>1,570</i>	<i>1,870</i>	<i>1,639</i>	<i>1,346</i>	<i>3,949</i>	<i>1,929</i>	<i>28,712</i>
Total	17,105	116,196	114,511	37,701	59,851	28,508	30,990	70,198	44,706	519,758

NB—Due to rounding the totals may not balance exactly.

TABLE 27: *Income Arising 1965 (£000's) (in five main sectors distinguishing remuneration of employees and other income)*

County	Agriculture		Industry		Distribution Transport		Public Administration	Other Domestic		Total
	Remuneration	Other	Remuneration	Other	Remuneration	Other		Remuneration	Other	
Carlow	566	1,679	2,090	919	728	385	205	1,160	536	8,267
Dublin	1,112	4,150	87,595	21,440	51,962	19,517	26,015	47,851	28,764	288,404
Kildare	983	3,137	4,658	1,726	1,039	705	2,411	1,878	976	17,512
Kilkenny	935	5,269	3,144	667	826	595	582	1,891	820	14,729
Laois	638	2,969	2,039	648	567	404	362	1,159	552	9,338
Longford	209	1,879	952	327	381	259	241	709	428	5,384
Louth	517	2,205	7,571	2,358	2,343	1,098	552	2,443	1,184	20,330
Meath	1,160	5,295	3,329	782	865	564	409	1,873	868	15,146
Offaly	443	2,792	3,738	1,799	865	567	384	1,250	696	12,534
Westmeath	451	2,583	2,381	620	1,047	602	1,618	1,836	810	11,949
Wexford	1,634	5,210	3,119	815	1,813	1,029	609	2,653	1,242	18,124
Wicklow	928	2,584	3,488	667	1,430	783	411	2,293	1,239	13,824
<i>Leinster</i>	<i>9,577</i>	<i>39,810</i>	<i>124,105</i>	<i>32,768</i>	<i>63,867</i>	<i>26,506</i>	<i>33,800</i>	<i>66,995</i>	<i>38,114</i>	<i>435,542</i>
Clare	436	5,962	3,311	1,954	1,218	902	948	1,995	1,059	17,785
Cork	2,646	22,622	23,584	7,887	11,138	4,825	5,063	12,460	6,575	96,801
Kerry	1,006	9,493	3,639	1,129	1,768	937	1,041	3,188	1,601	23,802
Limerick	1,297	9,533	8,057	2,164	4,257	2,025	2,242	4,822	2,521	36,917
Tipperary	1,712	10,781	5,953	1,537	2,089	1,331	1,404	3,746	1,946	30,499
Waterford	839	4,345	5,370	1,398	2,519	1,289	1,682	2,816	1,331	20,991
<i>Munster</i>	<i>7,935</i>	<i>62,736</i>	<i>49,914</i>	<i>16,070</i>	<i>22,989</i>	<i>11,309</i>	<i>11,780</i>	<i>29,027</i>	<i>15,033</i>	<i>226,795</i>
Galway	616	10,306	4,653	1,202	2,390	1,504	1,418	4,968	2,256	29,312
Leitrim	143	2,349	613	160	320	242	443	687	330	5,290
Mayo	293	7,885	3,160	901	1,443	1,010	874	2,750	1,313	19,627
Roscommon	226	5,139	1,173	337	587	405	627	1,207	658	10,359
Sligo	186	3,481	1,866	762	1,168	545	276	1,601	759	10,644
<i>Connacht</i>	<i>1,463</i>	<i>29,160</i>	<i>11,464</i>	<i>3,362</i>	<i>5,907</i>	<i>3,707</i>	<i>3,639</i>	<i>11,214</i>	<i>5,316</i>	<i>75,232</i>
Cavan	326	4,996	1,718	677	631	557	547	1,353	641	11,446
Donegal	773	5,857	3,941	975	1,454	1,153	900	2,741	1,213	19,007
Monaghan	226	3,676	1,711	451	627	469	360	1,335	555	9,408
<i>Ulster (part)</i>	<i>1,325</i>	<i>14,529</i>	<i>7,371</i>	<i>2,103</i>	<i>2,712</i>	<i>2,179</i>	<i>1,806</i>	<i>5,429</i>	<i>2,409</i>	<i>39,861</i>
Total	20,300	146,235	192,854	54,302	95,476	43,700	51,025	112,665	60,872	777,430

NB—Due to rounding the totals may not agree exactly.

TABLE 28: Income Arising 1960 by Source of Income (Ross estimates) (£,000's)

County	Remuneration of employees		Self-employed		Company trading profits*	Rent	Total
	Farm	Other	Farm	Other			
Carlow	427	2,503	1,646	414	340	223	5,554
Dublin	996	127,976	2,553	13,318	30,841	5,558	181,242
Kildare	844	6,246	2,777	826	1,043	380	12,116
Kilkenny	783	4,007	3,999	739	613	377	10,519
Laois	588	2,756	2,731	497	499	270	7,341
Longford	189	1,480	1,581	319	166	168	3,902
Louth	446	8,109	1,585	1,082	2,050	458	13,729
Meath	1,025	3,816	4,215	719	501	468	10,744
Offaly	386	4,025	2,604	607	734	321	8,678
Westmeath	413	4,163	2,221	632	530	343	8,313
Wexford	1,327	4,968	4,419	1,120	772	521	13,127
Wicklow	758	4,789	1,881	975	565	388	9,357
<i>Leinster</i>	<i>8,182</i>	<i>174,838</i>	<i>32,212</i>	<i>21,248</i>	<i>38,655</i>	<i>9,486</i>	<i>284,621</i>
Clare	364	3,857	4,883	968	575	405	11,051
Cork	2,262	32,505	15,329	4,561	6,766	2,237	63,660
Kerry	779	5,921	8,034	1,390	801	577	17,501
Limerick	1,217	11,299	6,701	1,774	2,189	854	24,035
Tipperary	1,468	8,251	7,954	1,741	1,271	814	21,498
Waterford	632	6,821	3,233	1,070	1,316	487	13,558
<i>Munster</i>	<i>6,722</i>	<i>68,654</i>	<i>46,134</i>	<i>11,503</i>	<i>12,918</i>	<i>5,373</i>	<i>151,304</i>
Galway	509	8,539	8,847	1,829	880	757	21,362
Leitrim	106	1,350	2,028	300	197	154	4,136
Mayo	239	5,142	6,380	1,229	717	561	14,268
Roscommon	160	2,417	3,986	511	279	342	7,695
Sligo	146	3,101	2,918	652	550	293	7,660
<i>Connacht</i>	<i>1,160</i>	<i>20,550</i>	<i>24,159</i>	<i>4,521</i>	<i>2,624</i>	<i>2,107</i>	<i>55,120</i>
Cavan	259	2,759	3,435	677	434	297	7,862
Donegal	598	6,054	4,831	1,383	897	468	14,230
Monaghan	184	2,695	2,525	568	371	276	6,620
<i>Ulster (part)</i>	<i>1,042</i>	<i>11,509</i>	<i>10,791</i>	<i>2,628</i>	<i>1,702</i>	<i>1,042</i>	<i>28,712</i>
TOTAL	17,105	275,550	113,296	39,900	55,898	18,009	519,758

*Include Income of Post Office and Post Office Savings Bank.

TABLE 29: *Income Arising 1965 by Source of Income (£000's)*

County	Remuneration of employees		Self-employed		Company trading profits*	Rent	Total
	Farm	Other	Farm	Other			
Carlow	566	4,183	1,625	585	1,061	248	8,267
Dublin	1,112	213,423	4,081	20,212	42,497	7,079	288,404
Kildare	983	9,085	3,016	1,259	1,839	429	17,512
Kilkenny	935	6,443	5,159	1,046	753	393	14,729
Laois	638	4,128	2,880	679	714	301	9,338
Longford	209	2,283	1,832	457	407	196	5,384
Louth	517	12,909	2,203	481	2,697	523	20,330
Meath	1,160	6,476	5,080	1,097	808	524	15,146
Offaly	443	6,237	2,699	1,830	1,970	355	12,534
Westmeath	451	6,888	2,465	943	818	390	11,949
Wexford	1,634	8,195	5,100	1,518	1,121	556	18,124
Wicklow	928	7,622	2,517	1,447	906	403	13,824
<i>Leinster</i>	<i>9,577</i>	<i>288,768</i>	<i>38,657</i>	<i>31,553</i>	<i>55,592</i>	<i>11,396</i>	<i>435,542</i>
Clare	436	7,472	5,848	1,296	2,268	466	17,785
Cork	2,646	52,245	22,310	6,359	10,722	2,518	96,801
Kerry	1,006	9,636	9,380	1,883	1,294	602	23,802
Limerick	1,297	19,378	9,359	2,549	3,327	1,008	36,917
Tipperary	1,712	13,192	10,561	2,297	1,867	870	30,499
Waterford	839	11,787	4,266	1,486	2,101	512	20,991
<i>Munster</i>	<i>7,935</i>	<i>113,710</i>	<i>61,724</i>	<i>15,871</i>	<i>21,579</i>	<i>5,975</i>	<i>226,795</i>
Galway	616	13,428	10,104	2,683	1,628	853	29,312
Leitrim	143	2,064	2,306	369	250	157	5,290
Mayo	293	8,226	7,735	1,633	1,148	594	19,627
Roscommon	226	3,594	5,013	679	477	371	10,359
Sligo	186	4,912	3,406	873	959	309	10,644
<i>Connacht</i>	<i>1,463</i>	<i>32,224</i>	<i>28,563</i>	<i>6,236</i>	<i>4,461</i>	<i>2,284</i>	<i>75,232</i>
Cavan	326	4,249	4,917	860	772	321	11,446
Donegal	773	9,036	5,771	1,768	1,160	499	19,007
Monaghan	226	4,033	3,603	712	553	280	9,408
<i>Ulster (part)</i>	<i>1,325</i>	<i>17,319</i>	<i>14,291</i>	<i>3,340</i>	<i>2,486</i>	<i>1,101</i>	<i>39,861</i>
TOTAL	20,300	452,020	143,236	57,000	841,180	20,756	777,430

*Includes Income of Post Office and Post Office Savings Bank.

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