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CHAPTER XVII

GOVERNMENT AS A FACTOR IN NATIONAL INCOME

The Number of Persons Employed by Government.

Estimates of the total number of persons working for each of the various divisions of government service within the limits of the United States appear in Table CXXII. The number of men in the Army, Navy, and Marine Corps moved upward slowly but steadily between 1909 and 1915, advanced with an accelerated pace in 1916, and then rose abruptly to a peak after the United States entered the war. The war closed in 1918, but the period of Army reduction extended to 1923, at which date the number of men found in the armed forces of the United States was smaller than at any time since 1916. By 1924, the number had increased slightly. Since then it appears to have remained stationary on a level some 80 per cent higher than that prevailing during the period 1909 to 1911.

Between 1909 and 1927, the number of men in the armed forces grew at a rate distinctly more rapid than the proportional increase in the population of the nation.

The number of employees in the postal service was kept almost constant between 1909 and 1918. Thereafter, the number of workers in this branch of the service tended to increase. Even so, the increase did not keep pace with the growth of the population of the country, for the working force of the Post Office Department increased by but 23 per cent between 1909 and 1927, while the population of the United States grew by over 30 per cent.

The number of employees engaged in other activities of the Federal Government showed a steady expansion between 1909 and 1915, a sharp rise during 1917 and 1918 to a marked peak in 1919, and then a decline, at first rapid and later slow,—this decline apparently continuing until 1927. At the peak of the war and after-war demand for civil assistance by the government, the number of such employees was more than three times as great as it was in 1909. By 1927, however, the number had diminished to such an extent that it was only about 70 per cent larger than in 1909.

Since States and Counties showed no marked tendency to take on additional employees during the war period, the trend of numbers employed in that field has been much more regular than in the

TABLE CXXII

ESTIMATED NUMBERS OF PERSONS ATTACHED TO THE VARIOUS BRANCHES OF GOVERNMENT IN THE CONTINENTAL UNITED STATES.

YEAR	THOUSANDS OF EMPLOYEES ATTACHED TO VARIOUS BRANCHES OF GOVERNMENT								
	All Branches	UNITED STATES			STATES AND COUNTIES ^d	CITIES AND VILLAGES			SCHOOL DISTRICTS ^e
		Army, Navy and Marines ^a	Postal Service ^b	General Government ^c		Police and Fire Departments ^g	Municipal Utilities ^f	General Government ^f	
1909	1,643	137	282	143	169	98	29	211	573
1910	1,709	134	286	145	182	102	30	238	591
1911	1,765	139	286	149	194	105	31	255	607
1912	1,821	147	289	149	206	107	32	264	626
1913	1,879	150	294	151	217	111	33	280	644
1914	1,947	161	296	162	213	114	35	297	669
1915	2,013	169	299	176	205	117	35	319	694
1916	2,085	202	301	192	197	120	36	319	717
1917	2,744	790	300	232	192	123	38	321	748
1918	5,210	3,023	290	433	214	126	39	305	779
1919	4,042	1,699	319	511	241	128	38	305	800
1920	2,719	374	326	468	268	131	45	283	826
1921	2,689	334	330	365	294	135	53	326	852
1922	2,618	260	321	301	305	138	50	366	877
1923	2,633	237	337	265	301	142	58	390	903
1924	2,674	250	338	261	301	146	57	386	934
1925	2,736	247	342	263	309	150	60	401	966
1926	2,785*	246*	345*	255*	316*	153*	62*	408*	999*
1927	2,819*	249*	347*	243*	321*	157*	64*	419*	1,018*

^a Based upon reports of the War Dept. and the Navy Dept.

^b Based upon reports of the Postmaster General.

^c Based upon the *Official Register* and the reports of the U. S. Civil Service Commission.

^d Based upon *The Census of Wealth, Debt, and Taxation, The Financial Statistics of States* issued by the U. S. Bureau of the Census, and upon numerous State reports.

^e Based upon reports of Fire and Police Departments in various cities and upon the U. S. *Census of Population*.

^f Based upon *The Financial Statistics of Cities*, issued by the U. S. Bureau of the Census, and upon numerous State reports.

^g Based upon reports of the U. S. Commissioner of Education.

* Preliminary estimate.

Federal civil service. The estimates presented indicate, however, that when the entire period is taken into consideration, the increase in employment in the State and County civil service is found to be relatively much larger than the growth in the Federal civil service, the increase between 1909 and 1927 being approximately 90 per cent as contrasted to the 70 per cent growth for the national government.

Between 1909 and 1927, the number of policemen and firemen rose by 60 per cent. At the same time, the number of employees engaged in operating municipal utilities increased 120 per cent and the number of those employed in the other branches of the government of cities and villages grew by approximately 98 per cent. The school districts of the country employed about 78 per cent more people in 1927 than in 1909.

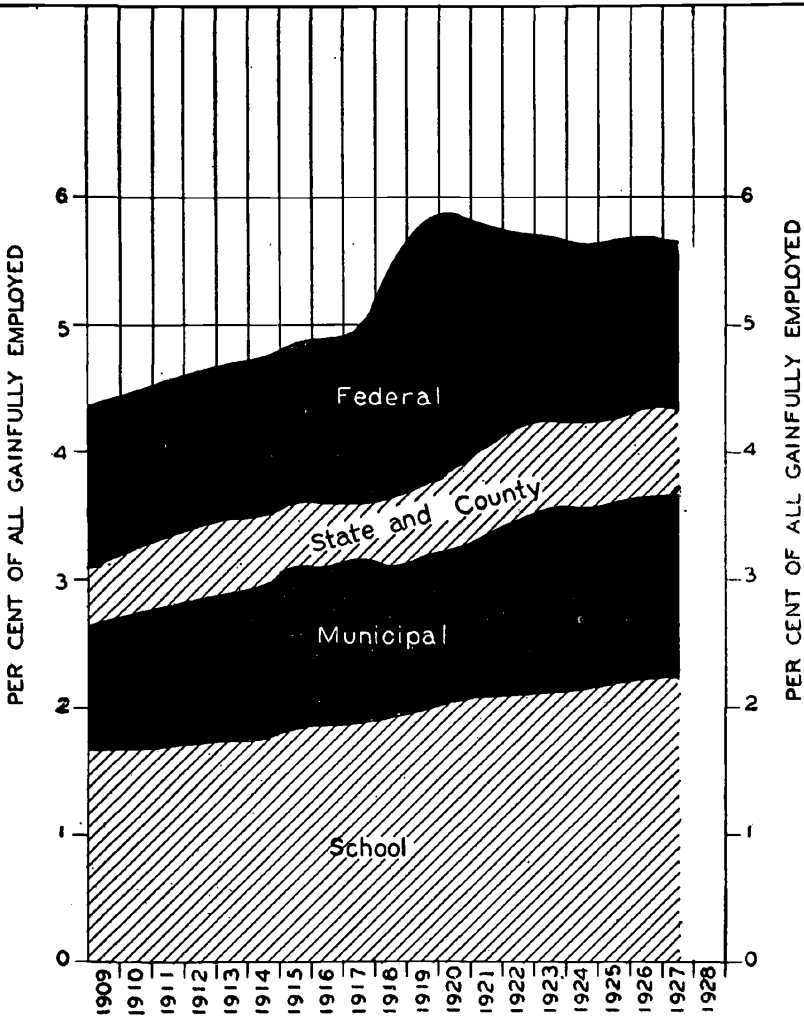
All the evidence, therefore, indicates that, in each type of governmental agency except the postal service, the fraction of the population employed therein grew,—in other words, the proportion of the activities of the nation carried on by government was steadily enlarged.

The graphs representing the percentages of the total population employed in each non-military division of government are found in Chart 59. This chart also brings out the fact that, as regards numbers, the school employees form the largest class of those working for government in the United States. The percentages are as follows:

Calendar Year	Percentage of Total Population Employed by			
	Federal Government	State and County Governments	Municipal Governments	School Districts
1909	1.24	.49	.99	1.67
1910	1.22	.52	1.06	1.68
1911	1.22	.54	1.09	1.70
1912	1.21	.57	1.12	1.73
1913	1.20	.59	1.15	1.74
1914	1.21	.56	1.18	1.77
1915	1.25	.54	1.24	1.83
1916	1.28	.51	1.23	1.86
1917	1.35	.49	1.23	1.90
1918	1.79	.53	1.17	1.93
1919	2.06	.60	1.17	1.99
1920	1.98	.67	1.15	2.06
1921	1.70	.72	1.26	2.09
1922	1.51	.74	1.34	2.12
1923	1.43	.71	1.41	2.14
1924	1.39	.70	1.37	2.17
1925	1.38	.70	1.39	2.20
1926	1.34	.71	1.40	2.24
1927	1.30	.71	1.41	2.24

CHART 59

PERCENTAGES OF ALL GAINFULLY OCCUPIED,
EMPLOYED IN NON-MILITARY SERVICE
BY THE VARIOUS BRANCHES OF GOVERNMENT^a



^a For data, see text.

TABLE CXXIII

ESTIMATED TOTAL AMOUNTS DISBURSED BY
THE VARIOUS BRANCHES OF GOVERNMENT
IN DIRECT PAYMENT FOR THE SERVICES OF EMPLOYEES

YEAR	MILLIONS OF DOLLARS PAID BY								
	All Branches of Govern- ment	FEDERAL GOVERNMENT			STATES AND COUN- TIES ^a	CITIES AND VILLAGES			SCHOOLS ^a
		Army, Navy and Marine Corps ^a	Post Office Depart- ment ^a	Mis- cella- neous Civil Depart- ments ^a		Police and Fire Depart- ments ^a	Muni- cipal Util- ities ^a	Mis- cella- neous Civil Depart- ments ^a	
1909	\$1,226	\$113	\$153	\$148	\$151	\$117	\$24	\$223	\$296
1910	1,314	110	160	157	166	126	26	254	316
1911	1,384	112	166	156	181	131	26	275	337
1912	1,465	119	174	156	199	138	27	290	362
1913	1,558	123	187	163	217	142	30	308	387
1914	1,656	128	199	177	219	151	33	334	414
1915	1,734	134	206	194	215	152	34	358	441
1916	1,821	149	214	212	212	157	35	365	477
1917	2,464	668	220	271	211	162	37	369	525
1918	5,272	3,023	243	563	245	179	40	388	591
1919	4,489	1,861	295	665	290	204	48	424	703
1920	3,519	527	346	644	351	238	61	482	870
1921	3,751	472	372	541	416	266	78	587	1,019
1922	3,775	397	383	458	441	262	79	647	1,109
1923	3,898	342	396	465	447	282	94	695	1,177
1924	4,053	334	426	450	459	297	99	739	1,249
1925	4,338	342	474	471	487	324	104	817	1,320
1926	4,750*			500					
1927	4,992*								

^a Sources of information are same as those referred to in Table CXXII.

* Preliminary estimate.

Salaries of Employees of Various Branches of Government.

It is, of course, obvious that this increase in the proportion of gainfully occupied persons employed by government tends to increase the ratio of tax levies to national income.

Table CXXIII shows the amounts disbursed in the form of wages and salaries by the various branches of government. As these totals are all expressed in dollars current in the various years, those for different dates are not comparable.

In Table CXXIV, we find the results obtained by dividing the

TABLE CXXIV

ESTIMATED AVERAGE ANNUAL PAY^a OF EMPLOYEES
IN VARIOUS BRANCHES OF GOVERNMENT SERVICE
IN THE CONTINENTAL UNITED STATES

YEAR	All Branches of Government	FEDERAL GOVERNMENT			STATES AND COUN- TIES	CITIES AND VILLAGES			SCHOOLS
		Army, Navy and Marine Corps	Post Office Depart- ment	Mis- cella- neous Civil Depart- ments		Police and Fire Depart- ments	Muni- cipal Util- ities	Mis- cella- neous Civil Depart- ments	
1909	\$ 746	\$ 829	\$ 541	\$1,030	\$ 893	\$1,187	\$ 847	\$1,058	\$ 517
1910	769	822	560	1,080	909	1,238	845	1,066	535
1911	784	810	579	1,050	931	1,251	852	1,080	556
1912	805	810	602	1,045	967	1,285	855	1,096	578
1913	829	822	638	1,077	1,001	1,279	911	1,102	601
1914	850	799	671	1,097	1,028	1,321	960	1,122	619
1915	861	792	689	1,106	1,053	1,294	965	1,123	635
1916	874	738	711	1,106	1,074	1,303	972	1,143	666
1917	898	845	736	1,165	1,100	1,313	983	1,149	703
1918	1,012	1,000	839	1,301	1,143	1,422	1,016	1,269	758
1919	1,111	1,096	924	1,300	1,203	1,592	1,264	1,388	878
1920	1,294	1,411	1,062	1,377	1,309	1,817	1,361	1,704	1,053
1921	1,395	1,413	1,128	1,483	1,416	1,968	1,479	1,802	1,195
1922	1,442	1,525	1,192	1,522	1,446	1,895	1,586	1,766	1,264
1923	1,480	1,441	1,176	1,752	1,486	1,985	1,620	1,784	1,303
1924	1,516	1,335	1,261	1,721	1,529	2,030	1,733	1,916	1,336
1925	1,585	1,385	1,386	1,792	1,575	2,164	1,744	2,037	1,367
1926									
1927									

^a Derived from figures presented in Tables CXXII and CXXIII.

* Preliminary estimate.

quantities in Table CXXIII by the numbers of employees recorded in Table CXXII. The figures in Table CXXIV represent, therefore, the average pay per employee in each branch of the government service, this average pay being measured in terms of the dollars current in each year. In order to permit of year to year comparisons, the figures appearing in Table CXXIV have been deflated by dividing them by index numbers representing the average prices, at the various dates, of consumers' goods used by urban employees. The figures thus derived, which appear in Table CXXV, illustrate the changes from year to year in the ability of government employees to buy consumable commodities. The facts are brought out

TABLE CXXV

PURCHASING POWER, IN 1913 DOLLARS,^a
OF THE AVERAGE ANNUAL PAY OF EMPLOYEES
IN VARIOUS BRANCHES OF GOVERNMENT SERVICE
IN THE CONTINENTAL UNITED STATES

YEAR	PURCHASING POWER ^b OF ANNUAL EARNINGS OF EMPLOYEES OF								
	All Branches of Govern- ment	FEDERAL GOVERNMENT			STATES AND COUN- TIES	CITIES AND VILLAGES			SCHOOLS
		Army, Navy and Marine Corps	Post Office Depart- ment	Mis- cella- neous Civil Depart- ments		Police and Fire Depart- ments	Muni- cipal Utili- ties	Mis- cella- neous Civil Depart- ments	
1909	\$790	\$878	\$573	\$1,090	\$945	\$1,257	\$897	\$1,120	\$547
1910	794	848	578	1,115	938	1,278	872	1,100	552
1911	809	836	597	1,083	961	1,291	879	1,114	574
1912	819	825	613	1,064	984	1,308	870	1,116	588
1913	829	822	638	1,077	1,001	1,279	911	1,102	601
1914	836	785	660	1,078	1,011	1,299	944	1,103	608
1915	832	765	666	1,069	1,017	1,250	932	1,085	614
1916	783	661	637	991	962	1,167	871	1,024	597
1917	689	648	564	893	844	1,007	754	881	539
1918	644	636	534	828	727	905	646	807	482
1919	606	598	505	710	657	869	690	758	479
1920	620	676	509	659	627	870	652	816	504
1921	775	785	627	824	787	1,094	822	1,001	664
1922	860	910	711	908	863	1,131	946	1,054	754
1923	867	844	689	1,026	871	1,163	949	1,045	763
1924	889	783	739	1,009	896	1,190	1,016	1,123	783
1925	909	794	795	1,028	903	1,241	1,000	1,168	784

^a "1913 Dollars" is an abbreviation for the phrase "dollars having purchasing power equivalent to that which they had in 1913."

^b Computed from the corresponding items in Table CXXIV by dividing by the appropriate price indices recorded in Table VII.

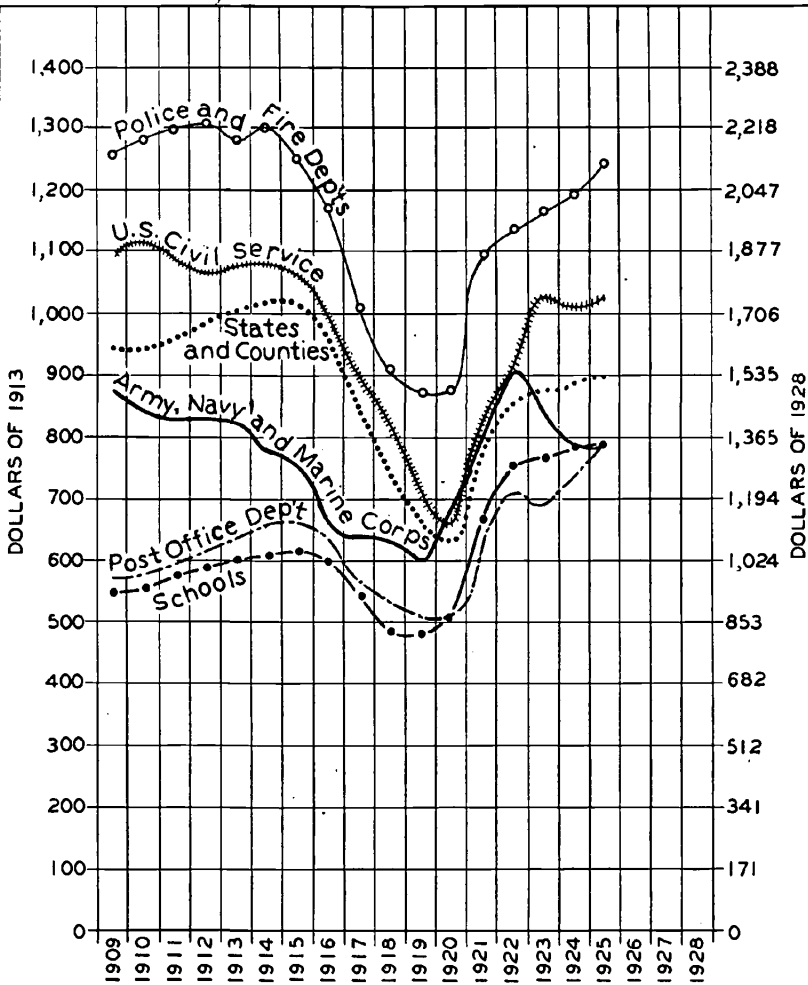
* Preliminary estimate.

by the graphs in Chart 60. On the right-hand side of this chart, a scale has been appended showing the average pay of each class when converted to dollars having the average purchasing power which they possessed in 1928.

Chart 60 brings out forcefully the striking effect of inflation on various classes of government employees. The amount of direct or consumers' goods which the average employee could buy with his salary fell off very sharply in the case of policemen and firemen,

CHART 60

PURCHASING POWER, IN 1913 DOLLARS,
 OF THE AVERAGE ANNUAL PAY OF EMPLOYEES
 IN VARIOUS BRANCHES OF GOVERNMENTAL
 SERVICE IN THE CONTINENTAL
 UNITED STATES*



* For data, see Table CXXV.

soldiers, sailors and marines, and miscellaneous civil employees of the Federal, State and County governments. Between 1915 and 1919, a somewhat less startling but still very marked, decline in the incomes of both post office and school employees also occurred. After 1920, the purchasing power of the average income increased greatly in the case of every class of governmental employee, but in 1925, the rise was still not sufficient to bring the average pay of policemen, firemen, Federal civil service employees, State and County employees, or members of the military and naval forces of the United States to the level prevailing during the period 1909 to 1912. By 1925, however, the postal and school employees had secured advances sufficient not only to offset losses occurring during the period of inflation but to give them substantially better incomes than they had in pre-war days.

Pensions and Gratuities Paid by Various Branches of Government.

Table CXXVI reveals the substantial increases in public expenditure arising out of payments for pensions, bounties, and gratuities. Between 1909 and 1927, the total sum represented by payments of this class was quintupled. Since the figures in Table CXXVI are expressed in terms of dollars current in various years, this increase of 400 per cent is partially accounted for by the rise in the price-level, but even when this factor is allowed for, the increase is startling. It might be inferred that practically all of the increase was ascribable to the large payments made by the Federal government to soldiers of the World War. The truth is, however, that, such expenditures of County and State governments increased at a rate proportionally more rapid than did the amount of the pensions and gratuities expended by the Federal government. In 1925, the cities and villages were paying nearly 10 times as much as in 1909, the counties $8\frac{1}{2}$ times as much, and the States nearly 9 times as much, while the Federal government was paying out only $3\frac{1}{2}$ times as much. In recent years, the total of governmental pensions, gratuities, and the like, has amounted to something more than 1 per cent of the entire realized income of the nation.

Interest Paid by Branches of Government.

In Table CXXVII there is recorded the total amount of interest paid out by various branches of government. Everyone is, of course, familiar with the enormous increase in the debt of the Federal government accompanying the World War, and hence no

TABLE CXXVI

APPROXIMATE AMOUNTS OF PENSIONS AND GRATUITIES PAID OUT BY THE VARIOUS BRANCHES OF GOVERNMENT IN THE CONTINENTAL UNITED STATES

YEAR	THOUSANDS OF DOLLARS				
	All Branches of Government	City and Village ^a	County ^b	State ^b	Federal ^c
1909	\$186,520	\$ 5,900	\$ 9,246	\$10,400	\$160,974
1910	185,458	6,062	9,746	11,000	158,650
1911	185,491	8,398	10,287	11,650	155,156
1912	196,503	9,300	10,854	12,320	163,579
1913	207,965	10,125	11,475	13,070	173,295
1914	205,951	10,845	12,198	13,940	168,968
1915	201,918	11,705	12,993	14,883	162,337
1916	203,831	13,750	13,992	16,064	160,025
1917	219,276	17,039	14,810	17,062	170,365
1918	469,182	18,522	16,087	18,576	415,997
1919	582,790	21,998	17,633	20,432	522,727
1920	713,713	22,000	26,233	30,503	634,977
1921	813,249	22,097	34,812	40,574	715,766
1922	887,678	40,286	61,528	71,962	713,902
1923	801,063	45,330	48,159	56,525	651,049
1924	869,902	52,330	107,516	126,490	583,566
1925	812,798	58,026	78,364	92,519	583,889
1926	889,849*				
1927	935,152*				

^a Based upon *The Financial Statistics of Cities*, published by the U. S. Bureau of the Census.
^b Based upon *The Financial Statistics of States*, published by the U. S. Bureau of the Census.
^c Based upon reports of the U. S. Commissioner of Pensions and of the U. S. Veterans' Bureau.
* Preliminary estimate.

one will be surprised at the increase from 18 millions to 780 millions in the amount of interest paid to individuals. Since 1919, the date when the maximum figure was reached, the Federal government has each year cut down its total of interest payments. By 1925, the aggregate had been reduced to 560 millions.

Between 1909 and 1918, State and local governments doubled their volume of interest payments. Furthermore, there has been no tendency in these other branches of government to imitate the Federal government by reducing in recent years the volume of interest payments, for the interest total for State and local governments continued to rise between 1918 and 1925, the figure for the latter year being two-thirds greater than that for 1918. The figures

TABLE CXXVII

ESTIMATED INTEREST PAYMENTS
MADE BY ALL BRANCHES OF GOVERNMENT
IN THE CONTINENTAL UNITED STATES

(MILLIONS OF DOLLARS)

YEAR	TOTAL INTEREST PAYMENTS	INTEREST PAID TO BANKS BY ALL BRANCHES OF GOV- ERNMENT ^a	INTEREST PAID TO CORPOR- ATIONS OTHER THAN BANKS ^b	INTEREST PAID TO INDIVIDUALS		
				Total	By Federal Govern- ment ^c	By State and Local Govern- ments ^d
1909	\$ 209	\$ 67		\$142	\$ 15	\$127
1910	253	74		178	15	163
1911	269	72		197	16	181
1912	278	77		201	16	185
1913	291	75		216	17	199
1914	312	80		232	17	215
1915	343	86		257	17	239
1916	356	85		272	18	254
1917	454	93		361	88	273
1918	766	170	\$ 59	537	285	252
1919	1,412	285	62	1,064	780	284
1920	1,413	267	68	1,078	771	307
1921	1,427	288	74	1,065	741	324
1922	1,524	309	85	1,130	758	372
1923	1,540	334	123	1,083	702	381
1924	1,490	349	168	973	594	379
1925	1,499	379	141	979	560	419

^a Based upon reports of the U. S. Comptroller of the Currency.

^b Based upon *Statistics of Income*, published by the U. S. Bureau of Internal Revenue. Figures before 1918 believed to be small.

^c Based upon the *Annual Reports* of the Secretary of the Treasury.

^d Based upon *The Financial Statistics of States* and upon *The Financial Statistics of Cities*, published by the U. S. Bureau of the Census.

just mentioned refer to the payments of interest to individuals. In addition, the various branches of government have been increasing the volumes of interest payments to banks and other corporations, the banks receiving more than five times as much income from this source in 1925 as in 1909. Figures for other corporations for years prior to 1918 are not available, but, since 1918, these payments have also been expanding at a rapid rate.

TABLE CXXVIII

AMOUNTS AND PERCENTAGES OF THE ENTIRE REALIZED
INCOME OF INDIVIDUALS RECEIVED FROM
EACH BRANCH OF GOVERNMENT

YEAR	INCOME IN MILLIONS OF DOLLARS RECEIVED FROM				PER CENT OF REALIZED INCOME* RECEIVED FROM			
	All Branch- es of Govern- ment	Federal Govern- ment	State and County Govern- ment	Muni- cipal Govern- ment and Schools	All Branch- es of Govern- ment	Federal Govern- ment	State and County Govern- ment	Muni- cipal Govern- ment and Schools
1909	\$1,554	\$ 590	\$187	\$ 777	5.25	1.99	.63	2.62
1910	1,678	601	205	872	5.34	1.91	.65	2.77
1911	1,767	606	223	938	5.55	1.90	.70	2.94
1912	1,862	630	243	989	5.48	1.85	.72	2.91
1913	1,981	664	265	1,053	5.55	1.86	.74	2.95
1914	2,093	691	271	1,132	5.87	1.94	.76	3.18
1915	2,192	714	271	1,207	5.89	1.92	.73	3.24
1916	2,297	753	272	1,272	5.31	1.74	.63	2.94
1917	3,044	1,418	276	1,350	5.93	2.76	.54	2.63
1918	6,278	4,531	311	1,437	10.39	7.50	.51	2.38
1919	6,136	4,123	362	1,651	9.30	6.25	.55	2.50
1920	5,311	2,923	447	1,940	7.18	3.95	.60	2.62
1921	5,629	2,842	535	2,252	8.88	4.48	.84	3.55
1922	5,792	2,709	624	2,459	8.79	4.11	.95	3.73
1923	5,783	2,555	604	2,623	7.78	3.44	.81	3.53
1924	5,896	2,387	746	2,762	7.64	3.09	.97	3.58
1925	6,130	2,430	719	2,981	7.48	2.97	.88	3.64

* For figures showing entire realized income, see Table XIV.

Income Drawn by Individuals from Various Branches of Govern- ment.

Of the realized income of all the individuals of the nation, the percentage derived from all branches of government increased from 5.25 in 1909 to 7.48 in 1925. The changes in percentages for three subdivisions of government are set forth in Table CXXVIII.

Relative to national income the greatest increase in percentages has occurred in the case of the municipal government and schools, the rise between 1909 and 1925 being 1.02 per cent. The least increase in percentages is found in the State and County governments, the percentage of the entire realized income rising in this field from 0.63 to 0.88 in the years between 1909 and 1925.