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THE DISPARITY BETWEEN THE RICH AND THE POOR IN THE BIG CITIES OF JAPAN

CHAPTER 1.

STATISTICS REGARDING THE DISTRIBUTION OF INCOMES

Is the disparity between the rich and poor daily growing in present-day society or is it gradually lessening? The component elements of society are diverse; there are farm villages, country towns and big cities. Any sweeping verdict on this problem would, therefore, be quite out of place. In the present article, I propose to make clear, by help of statistical figures, the disparity between the rich and the poor chiefly among the citizens of big cities, so as to furnish one datum contributory to the solution of one of the present-day social problems. Inasmuch as life in big cities is most up-to-date in present-day society, a good idea may be formed of the course which the social life is taking by studying the disparity between the rich and the poor in big cities.

As the big cities of Japan, we may mention Tokyo, Osaka, Nagoya, Kyoto, Kobe and Yokohama, but I have specially chosen Osaka as the object of study in the investigation of the disparity between the rich and the poor. Of the above mentioned six big cities, Tokyo and Osaka may be regarded as representative, but as the economic life of Tokyo was considerably upset by the Kwanto earthquake, I have omitted it from the present article, and confined my attention to the study of the disparity between the rich and poor in Osaka. Various methods may be adopted for the study of the disparity between the rich and poor. As one

method, it may be suggested that on the occasion of census-taking, the investigation should be made of property and incomes as well as population. In the present state of Japan, however, a more pertinent method appears to be to study objects of taxation on the basis of the statistical figures of taxes of various kinds. As tax statistics which are of use in the investigation of the disparity between the rich and poor, we may point out those regarding the property tax and the income tax. Japan lacks a static property tax, the only property tax she has—which is dynamic in nature—being the succession tax. To make use of the statistics of the property tax, therefore, means the utilization of the statistics of the succession tax. The succession tax is collected in connection with the transfer of property for inheritance, and as progressive rates are adopted in this tax according to the amount of property, the statistical figures regarding the succession tax are of some value in making clear the disparity between the rich and poor. But seeing that the amount of the property inherited varies every year, and that, moreover, the method of levying the succession tax in this country leaves much to be desired, it is difficult to expect much from the study of the statistics of the succession tax in this country. In view of the absence of a static property tax in this country and of the very imperfect nature of the succession tax, which embodies a dynamic property tax, I have refrained from basing my present study on the statistical figures of property taxation. On the other hand, the income tax was introduced into this country as early as 1887. It underwent far-reaching revisions in 1899 and in 1920, minor revisions being effected several times. Such being the case, the statistics of the income tax furnish materials too valuable to be ignored in the study of the disparity between the rich and poor. In the Japanese income taxation system, the C-class income tax is graded so that progressive taxation rates may be levied according to the amount of incomes, so we are able to look into the disparity between the rich and poor by the help of the progressive grades of incomes.

In short, in my study of the disparity between the rich and poor in Osaka, I have made use of the distribution statistics of the C-class income tax in the city. I will, in the following chapters, first explain the methods of study adopted and then deal with the results of the investigation. The income tax was first imposed in Japan in 1887, but in the present article, the statistical figures of the tax between 1912 and 1931 only were made use of, as they are more complete than those of other years.

CHAPTER 2.

HOW TO MEASURE THE DISPARITY BETWEEN THE RICH AND POOR

As already mentioned, in the Japanese income taxation, progressive rates are adopted in regard to the C-class income tax, a fact which helps us to work out the number of families belonging to the various grades of progressive taxation, so that we can see the relative percentage of bigger and smaller income tax payers, or, in other words, the disparity between the rich and poor. Accordingly, I will first study the grades of incomes as one means of measuring the wide gap between the moneyed and the moneyless class, then analyse the details of the C-class incomes, and finally offer an explanation of the methods employed for finding the number of families belonging to each grade.

(1) THE GRADES OF THE C-CLASS INCOMES

The most important factor in measuring the disparity between the rich and poor is the progressive grades of incomes. These grades and the untaxable limit have undergone the following changes since 1912 (page 36—37):—

By utilising information regarding the progressive grades of incomes and the untaxable limit, we can compare the number of those who have large incomes with that of those who have small incomes, thereby making clear the disparity

Law No. 11, promulgated on July 31st, 1920.

Article 3. Income tax shall be levied on the following incomes:—

A-class: (omitted)

B-class: (omitted)

C-class: Incomes of individuals not belonging to the B-class.

Article 20. No income tax shall be imposed on C-class incomes of less than ¥800.

Article 23. The C-class incomes shall be divided into the following grades to which the progressive rates shall be applied.

Amount not exceeding	¥800	0.5%
Amount exceeding	¥800	1%
"	¥1,000	2%
"	¥1,500	3%
"	¥2,000	4%
"	¥3,000	5%
"	¥5,000	6.5%
"	¥7,000	8%
"	¥10,000	9.5%
"	¥15,000	11%
"	¥20,000	13%
"	¥30,000	15%
"	¥50,000	17%
"	¥70,000	19%
"	¥100,000	21%
"	¥200,000	23%
"	¥500,000	25%
"	¥1,000,000	27%
"	¥2,000,000	30%
"	¥3,000,000	33%
"	¥4,000,000	36%

Law No. 8, promulgated in March, 1926.

Article 3. Income tax shall be levied on the following incomes:—

A-class: (omitted)

B-class: (omitted)

C-class: Incomes of individuals not belonging to the B-class.

Article 20. No income tax shall be imposed on C-class incomes of less than ¥1,200.

Article 23. C-class incomes shall be divided into the following grades to which the progressive rates shall be applied as follows:

Amount not exceeding	¥1,200	0.8%
Amount exceeding	¥1,200	2%
"	¥1,500	3%
"	¥2,000	4%
"	¥3,000	5%
"	¥5,000	6.5%
"	¥7,000	8%
"	¥10,000	9.5%
"	¥15,000	11%
"	¥20,000	13%
"	¥30,000	15%
"	¥50,000	17%
"	¥70,000	19%
"	¥100,000	21%
"	¥200,000	23%
"	¥500,000	25%
"	¥1,000,000	27%
"	¥2,000,000	30%
"	¥3,000,000	33%
"	¥4,000,000	36%

between the rich and poor. One noteworthy fact is that the tax laws enacted in 1913 (Article 4-e, Law No. 13, promulgated on April 8th, 1913) and in 1918 (Article 4-e, Law No. 5, promulgated on March 23rd, 1918) provide for the deduction of certain sums in assessment in favour of grades of incomes of less than ¥1,000. The grades of incomes during the last seventeen years may be classified as follows on the basis of the clauses providing for deduction in assessment, progressive taxation and the untaxable limit: -

1912-1913:	(a)	Over ¥300 inclusive and less than ¥500.
	(b)	" ¥500 " ¥1,000.
	(c)	" ¥1,000 " ¥2,000.
	(d)	" ¥2,000 " ¥3,000.
	(e)	" ¥3,000 " ¥5,000.
	(f)	" ¥5,000 " ¥10,000.
	(g)	" ¥10,000 " ¥15,000.
	(h)	" ¥15,000 " ¥20,000.
	(i)	" ¥20,000 " ¥30,000.
	(j)	" ¥30,000 " ¥50,000.
	(k)	" ¥50,000 " ¥100,000.
	(l)	" ¥100,000 inclusive.

1913-1918:	(a)	Over ¥400 inclusive and not exceeding ¥500.
	(b)	Over ¥500 and not exceeding ¥700.
	(c)	" ¥700 " ¥1,000.
	(d)	" ¥1,000 " ¥2,000.
	(e)	" ¥2,000 " ¥3,000.
	(f)	" ¥3,000 " ¥5,000.
	(g)	" ¥5,000 " ¥7,000.
	(h)	" ¥7,000 " ¥10,000.
	(i)	" ¥10,000 " ¥15,000.
	(j)	" ¥15,000 " ¥20,000.
	(k)	" ¥20,000 " ¥30,000.
	(l)	" ¥30,000 " ¥50,000.
	(m)	" ¥50,000 " ¥70,000.
	(n)	" ¥70,000 " ¥100,000.
	(o)	" ¥100,000.

1918-1920:	(a)	Over ¥500 inclusive and not exceeding ¥700.
	(b)	Over ¥700 and not exceeding ¥1,000.
	(c)	" ¥1,000 " ¥2,000.
	(d)	" ¥2,000 " ¥3,000.
	(e)	" ¥3,000 " ¥5,000.
	(f)	" ¥5,000 " ¥7,000.

(g)	Over ¥7,000 and not exceeding	¥10,000.
(h)	" ¥10,000 "	¥15,000.
(i)	" ¥15,000 "	¥20,000.
(j)	" ¥20,000 "	¥30,000.
(k)	" ¥30,000 "	¥50,000.
(l)	" ¥50,000 "	¥70,000.
(m)	" ¥70,000 "	¥100,000.
(n)	" ¥100,000 "	¥200,000.
(o)	" ¥200,000.	
1920-1926:	(a) Over ¥800 inclusive and not exceeding ¥1,000.	
	(b) Over ¥1,000 and not exceeding	¥1,500.
	(c) " ¥1,500 "	¥2,000.
	(d) " ¥2,000 "	¥3,000.
	(e) " ¥3,000 "	¥5,000.
	(f) " ¥5,000 "	¥7,000.
	(g) " ¥7,000 "	¥10,000.
	(h) " ¥10,000 "	¥15,000.
	(i) " ¥15,000 "	¥20,000.
	(j) " ¥20,000 "	¥30,000.
	(k) " ¥30,000 "	¥50,000.
	(l) " ¥50,000 "	¥70,000.
	(m) " ¥70,000 "	¥100,000.
	(n) " ¥100,000 "	¥200,000.
	(o) " ¥200,000 "	¥500,000.
	(p) " ¥500,000 "	¥1,000,000.
	(q) " ¥1,000,000 "	¥2,000,000.
	(r) " ¥2,000,000 "	¥3,000,000.
	(s) " ¥3,000,000 "	¥4,000,000.
	(t) " ¥4,000,000.	
1926-1931:	(a) Over ¥1,200 inclusive and not exceeding ¥1,500.	
	(b) Over ¥1,500 and not exceeding	¥2,000.
	(c) " ¥2,000 "	¥3,000.
	(d) " ¥3,000 "	¥5,000.
	(e) " ¥5,000 "	¥7,000.
	(f) " ¥7,000 "	¥10,000.
	(g) " ¥10,000 "	¥15,000.
	(h) " ¥15,000 "	¥20,000.
	(i) " ¥20,000 "	¥30,000.
	(j) " ¥30,000 "	¥50,000.
	(k) " ¥50,000 "	¥70,000.
	(l) " ¥70,000 "	¥100,000.
	(m) " ¥100,000 "	¥200,000.
	(n) " ¥200,000 "	¥500,000.
	(o) " ¥500,000 "	¥1,000,000.
	(p) " ¥1,000,000 "	¥2,000,000.

- (q) Over ¥2,000,000 and not exceeding ¥3,000,000.
- (r) " ¥3,000,000 " ¥4,000,000.
- (s) " ¥4,000,000.

The grading of incomes in 1912—13 was on the basis of "over so much inclusive and less than so much," while since 1913 it has been altered to the basis of "over so much and not exceeding so much." So, accurately speaking, the two methods of grading do not tally. For instance, the grade representing an income of "over ¥2,000 inclusive and less than ¥3,000" is inclusive of the ¥2,000 income but not inclusive of the ¥3,000 income, while the grade defined as "over ¥2,000 and not exceeding ¥3,000" includes the ¥3,000 income, though not the ¥2,000 income. For convenience' sake, however, I have made no discrimination in the treatment of both cases in the present article. I have by this means found out the number of families belonging to each grade of C-class incomes, thereby securing the data for measuring the disparity between the rich and the poor. To classify the grades more minutely than I have done was impossible. Again, as the grading, the untaxable limit and deduction clauses for assessment varied, the grouping was naturally affected.

(2) CONTENTS OF C-CLASS INCOMES

Next, the contents of C-class incomes deserve attention. In other words, attention must be directed both to the kinds of objects on which the C-class income tax is imposed and to the modification clauses which are provided for taxing these objects.

Under the income Tax Law now (1931) in force, the incomes of individuals which do not belong to the B-class are defined as the C-class incomes, and assessment has been made in accordance with the following rules since 1926:—

Article 14. C-class incomes shall be assessed according to the rules enumerated below:—

- (a) The amount of revenue in the previous year, in the case of interest on loans of non-business nature, and the interest on public bonds, company

debentures and deposits not belonging to the B-class incomes.

(b) The amount of the total revenue in the previous year minus the necessary expenses, in the case of incomes from forests.

(c) The amount of revenue between March 1st of the previous year and the end of February of the current year, in the case of bonuses, and allowances partaking of the nature of bonuses.

(d) The amount received between March 1st of the preceding year and the end of February of the current year (the amount which was paid, in the case of dividends on unregistered shares) with a deduction of 40 per cent., in the case of dividends of the profit or interest, or the distribution of the surplus which one gets from juridical persons.

(e) The amount received in the preceding year, in the case of salaries, wages, annual allowances, annuities, pensions, retiring allowances, and other grants partaking of the nature of these. The estimated annual income of the current year, in cases where the incomes from these allowances do not date from January 1st of the preceding year.

(f) The total revenue of the preceding year minus the necessary expenditure, in the case of incomes not falling under any of the items mentioned above. The estimated annual income of the current year, where the revenue from the property, business or occupation dit not date from January 1st of the preceding year.

It must, however, be noted that these rules were laid down in 1926. Before that year, various methods of assessment were adopted as follows : —

Law No. 17, promulgated in 1901:— Article 4. Incomes shall be assessed according to the following classification : 1. (omitted) 2. (omitted) 3. The C-class income shall be assessed on the basis of the estimated annual amount representing the total revenue minus the necessary expendi-	Law No. 13, promulgated in 1913. Article 4-c. C-class incomes shall be assessed according to the following rules :— 1. With regard to salaries, wages, grants, annual allowances, annuities, pensions, retiring allowances, interest on loans or deposits of a non-business nature and interest on public loans and debentures not belonging to B-class	Law No. 11, promulgated in 1920. Article 14. C-class incomes shall be assessed according to the following rules :— 1. With regard to salaries, wages, annual allowances, annuities, pensions, retiring allowances, and other grants partaking of the nature of these, interest on loans of a non-business nature, interest on public loans, and debentures not belonging to B-class incomes and interest on deposits, assessment shall be made on the estimated annual revenue. 2. With regard to incomes from farms and fields, assessment shall be made on the basis of the estimated annual revenue representing
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ture. With regard to the interest on public bonds and company debentures not paid in the territory where the present law operates, interest on loans or deposits of a non-business nature the dividends, received from juridical persons which are not amenable to income taxation under the present law, salaries, wages, special allowances, annual allowances, annuities and pensions, assessment shall be made on the estimated annual amount of the revenue, and in regard to forestry incomes, assessment shall be on the basis of the earnings of the previous year, while assessment in respect of incomes from farms and fields shall be based on the average revenue for the preceding three years.

incomes, assessment shall be made on the basis of the estimated annual revenue.

2. The revenue from farms and fields shall be assessed on the basis of the estimated annual revenue representing the average of the total incomes for the preceding three years minus the necessary expenditure.

3. Forestry incomes shall be assessed on the basis of the total revenue of the previous year minus the necessary expenditure.

4. With regard to the dividends received from juridical persons in foreign countries or the territories where the present law is not in operation, the amount received in the previous year shall be taken as the basis of assessment.

5. Assessment on all other incomes shall be made on the basis of the estimated annual amount of the total revenue minus the necessary expenditure.

the average of the total incomes for the preceding three years minus the necessary expenditure. In the case of farms and fields which were not cultivated continually during the preceding three years either by their owners or by tenants, the estimated annual revenue from neighbouring and kindred farms and fields shall be taken as the basis of assessment.

3. Forestry incomes shall be assessed on the basis of the total revenue of the previous year minus the necessary expenditure.

4. As to bonuses or allowances partaking of the nature of a bonus, the amount received between April 1st of the previous year and the end of March of the current year shall form the basis of assessment.

5. Dividends of profit or interest or the distribution of surplus received from juridical persons shall be assessed with regard to the income accruing between April 1st of the previous year and the end of March of the current year minus an amount equivalent to 40 per cent. of the income. As regards dividends received by persons holding unregistered shares, assessment shall be made on the income accruing during the period referred to minus a sum equivalent to 40 per cent. of the income.

6. Assessment on incomes not falling under any of the foregoing items shall be made on the basis of the estimated annual amount of the total revenue minus the necessary expenditure.

The new rules differ from the old ones in many respects. The most striking points of difference are the adoption of actual receipts, instead of estimated revenue, as the basis of assessment, and the imposition of the tax on bonuses and dividends, which were formerly free from taxation. Such being the case, the rates of the C-class income tax, even on the same objects of taxation, have undergone marked changes during the past seventeen years since 1912.

At first, assessment was made on the total amount of the C-class income, but subsequently various modification clauses were provided with a view to deducting certain specified sums before assessment, according to the source of revenue or the uses to which the revenue was put.

As to the modification clauses for assessment in regard to the sources of revenue, the system of deducting certain specified sums from incomes from service was adopted, and the nature of the modifications has been changed by degrees.

Law No. 13, promulgated in 1913. Article 4-d. With regard to salaries, wages, special allowances and annual allowances, which are among the items of C-class incomes, the estimated annual revenue minus 10 per cent. of the amount shall be regarded as the income.	Law No. 11, promulgated in 1920. Article 15. In case the total income worked out according to the rules of the preceding Article does not exceed ¥1,200, 10 per cent. of the amount shall be deducted from such incomes as salaries, wages, annual allowances, annuities, pensions, retiring allowances, bonuses and other allowances partaking of the nature of these, while a 20 per cent. deduction shall be made, in case the total income does not exceed ¥6,000.	Law No. 8, promulgated in 1926. Article 15. In case the total income worked out according to the rules of the foregoing Article does not exceed ¥12,000, the following sums shall be deducted from the incomes from service. 1. In case the total income does not exceed ¥6,000, a 20 per cent. deduction shall be made from incomes from service. 2. In case the total income includes receipts other than from service amounting to ¥6,000 and over, 10 per cent. of the incomes from service shall be deducted. 3. In case the total income exceeds ¥6,000 and the receipts from other than service are less than ¥6,000, a 20 per cent. deduction shall be made from the income from service so far as it does not exceed ¥6,000 combined with receipts from other than service, while from the remainder of the income from service a 10 per cent. deduction shall be made.
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As regards the modification clauses provided in favour of the uses to which the income is put, the deduction of certain sums on account of dependants and the deduction of the insurance premium from the income may be mentioned.

The clause providing for the deduction of certain sums on account of dependants was first created in 1920, and has been altered since as follows:—

Law No. 11, promulgated in 1920. Article 16. In case the amount worked out according to the provisions of the foregoing two Articles does not exceed ¥3,000, the sums given in the following items shall be deducted from the amount, on application by the earner of the income, provided his family has among its members living together, including the head of the family, a person or persons under 18 years of age or over 60 inclusive, or a deformed or disabled person or persons, on April 1st of the current years:— 1. In case the income does not exceed ¥1,000: ¥100 per head of persons of under 18 or over 60 inclusive or deformed or disabled persons. 2. In case the income does not exceed ¥2,000: ¥70 " " 3. In case the income does not exceed ¥3,000: ¥50 " "	Law No. 8, promulgated in 1926. Article 16. In case the total amount of income worked out according to the provisions of the foregoing two Articles does not exceed ¥3,000, the sums of ¥100 shall be deducted, on application by the earner of the income, from the amount for each such members of the family, including the head of the family, living together on March 1st of the current year, as are under 18 years of age or over 60 inclusive, or deformed or disabled.
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With regard to the deduction of the premium, Law No. 41, promulgated in April, 1923, has the following stipulation:—

Article 16-c. The premium paid on the contract of life insurance which has the earner of the income or a member of his or her family or the heir of such person as the beneficiary, shall be deducted from the income, according to a specified order, on application by the earner of the income, within the limit of ¥200 a year.

Such being the case, C-class incomes of the same amount are sometimes assessed variously, when the progressive rates

of taxation are applied. They are, in some cases, assessed as they are, and deductions are made for assessment, in other cases, in a variety of ways according to the sources of the incomes or the uses to which the incomes are put.

In short, it is an undeniable fact that the contents of C-class incomes have undergone much change through several revisions of the Income Tax Law. Consequently, incomes of the same grades were differently taxed as years of assessment differed.

(3) METHOD OF FINDING THE NUMBER OF INCOME-EARNING FAMILIES

The latest annual of statistics, that is, the 48th Statistical Year Book of Japan, gives a table showing the amount of C-class incomes of various grades. From this table, I reproduce the amount of incomes and the number of income tax payers, together with the average amount of income per head of the income tax payers, worked out on the basis of these two factors, as follows:—

Table No. 1.

Amount of C-class incomes in 1927.¹⁾

		Number of income-tax payers	Amount of income (In ¥1,000)	Average amount of income
Amount of C-class incomes	Total	1,002,616	2,405,679	—
	Not exceeding ¥1,200	32,072	34,265	1,068
	Not exceeding ¥2,000	505,802	584,091	1,154
	Not exceeding ¥5,000	322,513	706,383	2,190
	Not exceeding ¥10,000	87,723	377,085	4,298

1) The 48th Statistical Year Book of Japan. p. 366—377.

Not exceeding ¥20,000	33,901	250,925	7,401
Not exceeding ¥50,000	15,333	214,169	13,967
Less than ¥100,000	3,521	96,920	27,526
Over ¥100,000 inclusive	1,751	141,841	81,005

Inasmuch as an income of less than ¥1,200 is exempted from taxation under the Income Tax Law in force, the grade in Table No. 1 described as "not exceeding ¥1,200" refers to those people whose income is exactly ¥1,200. So, it may appear incongruous that the average amount of income for people getting ¥1,200 is given as ¥1,068. Equally incongruous will it appear that the average amount of income for those getting from ¥1,200 to ¥2,000 is given as ¥1,154, that for those getting from ¥5,000 to ¥10,000 as ¥4,298, that for those getting from ¥10,000 to ¥20,000 as ¥7,401, that for those getting from ¥20,000 to ¥50,000 as ¥13,967, that for those getting from ¥50,000 to ¥100,000 as ¥27,526, and that for those getting over ¥100,000 inclusive as ¥81,005, though the figure of ¥2,190 given as the average income of those getting from ¥2,000 to ¥5,000 may be accepted. Such apparent incongruities are ascribable to the following stipulations :—

Law No. 17, promulgated in 1899. Article 3. The C-class income of the head and other members of the family living together shall be put together and the rates mentioned in the present Article shall be applied to the total. This rule also applies	Law No. 13, promulgated in 1927. Article 3. In the application of the C-class income rates, the incomes of the head and other members of the family living together shall be put together, and the amount worked out by applying such rates to the total shall be apportioned	Law No. 11, promulgated in 1920. Article 23. In the case of the foregoing paragraph, the incomes of the head and other members of the family living together shall be put together, and the rates be applied to the total. The amount thus worked out shall be apportioned
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ot cases where two or more members of the family live together separately from the head of the family.	<i>pro rata</i> to the incomes of members of the family for fixing the amount of assessment for each. This rule also applies to cases where two or more members of the family live together, separately from the head of the family.	tioned <i>pro rata</i> to the incomes of members of the family for fixing the amount of assessment for each. This rule also applies to the incomes of two or more members of the family living together, separately from the head of the family.
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Supposing that the head of a family gets an income of ¥5,800, and two other members of the family living with him get an income of ¥4,000 and ¥1,200 respectively, the total of their incomes being ¥11,000, the statistical returns include this family in the grade with an income of from ¥10,000 to ¥20,000, though the number of tax payers in this case is given as three—the head and two members of the family—, whereas, as a matter of fact, the family consists of three tax payers, one with an income of ¥1,200, another with an income belonging to the grade of from ¥2,000 to ¥5,000 and the other to the grade of from ¥5,000 to ¥10,000. Such being the case, the number of tax payers given in the statistical returns does not furnish a reliable datum for measuring the disparity between the rich and poor, though it may be of some value for finding the number of people from whom the income tax was collected. In order to correct these delusive figures properly, the number of the subordinate tax-paying members of the families must be deducted from the number of tax payers given in the table, as otherwise the number of taxpaying families will not be found out. Table No. 2 shows the number of tax payers, the number of subordinate tax-paying members of one and the same family, and the number of tax-paying families throughout the country in the fiscal year 1927—1928.

Table No. 2.
Number of families paying the C-Class income tax.²⁾

Grades of incomes	Number of tax payers	Subordinate tax-paying members of families	Number of tax-paying families
1,200	32,072	3,518	28,554
1,200— 1,500	277,242	62,376	214,866
1,500— 2,000	228,560	56,859	171,701
2,000— 3,000	175,281	44,993	130,288
3,000— 5,000	147,232	43,607	103,625
5,000— 7,000	52,321	18,314	34,007
7,000— 10,000	35,402	14,005	21,397
10,000— 15,000	23,359	10,430	12,929
15,000— 20,000	10,542	5,050	5,492
20,000— 30,000	9,255	4,735	4,520
30,000— 50,000	6,078	3,312	2,766
50,000— 70,000	2,177	1,269	908
70,000 - 100,000	1,344	811	533
100,000 - 200,000	1,262	802	460
200,000 - 500,000	410	252	158
500,000—1,000,000	55	33	22
1,000,000 - 2,000,000	17	9	8
2,000,000—3,000,000	0	0	0
3,000,000—4,000,000	1	0	1
4,000,000—x	6	5	1
Total	1,002,616	270,380	732,236

In the past, Drs. Takano,³⁾ Takada⁴⁾ and Hijikata⁵⁾ have made public the valuable results of their respective researches in regard to the statistics of the distribution of C-class incomes, but practically all of these scholars confined their

2) The 54th Statistical Annual of the Bureau of Taxation. p. 4.

3) On the increase of the national income and its distribution in Japan, according to the statistics of the income tax.

4) On the Pareto' line of the distribution of national income.

5) Distribution of national income in Japan.

attention to the number of tax payers in their researches, entirely leaving out of consideration the number of tax-paying families. Researches conducted on the basis of the number of tax payers, which is little short of the imaginary quantity, cannot be expected to lead to any accurate measurement of the disparity between the rich and poor. In the *Keizai Ronso* (The Economic Review), therefore, I have often emphasised the necessity of deducting the subordinate tax-paying members of one and the same family from the total number of the tax payers given in the statistical returns. In the present article also, I have investigated the distribution of tax-paying families among the various grades of incomes, and on the basis of the figures thus obtained, I have endeavoured to measure the disparity between the rich and poor.

CHAPTER 3. DISTRIBUTION OF INCOMES IN THE CITY OF OSAKA

For the above-mentioned reason, I made inquiries into the distribution of the C-class-income-tax-paying families in the city of the Osaka for the purpose of making clear the disparity between the rich and poor in big cities. The local statistics of the distribution of incomes in this country have been annually compiled since 1909, but unfortunately such statistics are lacking in the case of Osaka in respect of the subordinate tax-paying members of families for 1909, 1910 and 1911, and consequently my inquiries have been made about the tax-paying families since 1912. In Table No. 3 is shown the state of distribution of tax-paying families not only in Osaka but in the whole country among the various grades of incomes (page 50—52).

Table No. 3 embodies the distribution list, but owing to the fact that the grading of incomes was very different in 1912—1913, 1913—1918, 1918—1920, 1920—1926, and 1926—1931, the table is ill-contrived as an indication of the general

The amount of income		300—500		500—1,000			1,000—2,000		
		300 400	400 500	500 700	700—1,000		100—1,500		1,500 2,000
					700 800	800 1,000	1,000 1,200	1,200 1,500	
Japan	1912	561,603		300,117			100,286		
	1913	235,035		194,994			104,771		
	1914	229,056		205,252			110,051		
	1915	241,223		197,898			104,517		
	1916	245,720		192,602			102,663		
	1917	248,451		209,544			116,020		
	1918			340,467			159,745		
	1919			383,812			258,015		
	1920						303,546		
	1921						367,484		
	1922						414,242		
	1923						435,327		
	1924						424,049		
	1925						456,780		
	1926						286,057		
	1927						243,420		
	1928						223,314		
	1929						223,279		
	1930						216,464		
Osaka	1912	23,487		12,243			4,904		
	1913	10,835		7,799			5,087		
	1914	11,060		7,675			5,455		
	1915	12,679		7,199			4,982		
	1916	12,971		7,932			5,427		
	1917	12,365		8,816			6,426		
	1918			13,742			8,369		
	1919			13,189			10,943		
	1920						10,895		
	1921						11,005		
	1922						12,296		
	1923						15,098		
	1924						14,426		
	1925						16,017		
	1926						22,275		
	1927						9,706		
	1928						12,996		
	1929						15,098		
	1930						16,420		
						17,695			
						25,327			
						15,814			
						15,577			
						14,936			
						14,852			
						14,469			

Table No. 3.

The distribution of tax-paying families belonging to the various grades

2,000 3,000	3,000 5,000	5,00—10,000		10,000 15,000	15,000 20,000	20,000 30,000	30,000 50,000	50,000—
		5,000 7,000	7,000 10,000					50,000 70,000
25,459	15,685	7,581		1,578	581	381	197	
25,803	16,078	5,126	2,884	1,696	639	423	205	46
26,883	16,897	5,289	3,104	1,809	687	467	206	57
25,623	15,865	5,066	2,925	1,676	637	428	190	48
25,506	16,312	5,083	3,024	1,747	663	444	211	80
30,116	19,411	6,255	3,874	2,418	943	734	441	147
42,026	27,584	9,740	6,031	3,687	1,574	1,191	731	232
63,825	41,574	14,328	8,722	5,155	2,118	1,663	1,014	295
98,914	59,810	18,944	11,735	6,820	2,785	2,255	1,233	342
119,978	86,103	28,200	18,052	10,722	4,574	3,737	2,357	712
138,204	96,529	31,372	20,307	12,416	5,240	4,236	2,723	848
149,196	104,992	35,320	23,088	13,871	5,803	4,865	2,997	1,055
147,562	103,108	34,141	22,079	13,306	5,485	4,485	2,802	918
153,746	107,250	35,416	22,807	13,823	5,691	4,611	2,820	953
136,564	109,484	35,773	22,648	13,685	5,546	4,595	2,793	957
130,288	103,625	34,007	21,397	12,929	5,492	4,520	2,766	908
125,371	101,086	33,366	20,864	12,865	5,336	4,341	2,670	897
126,976	103,813	34,407	21,536	13,114	5,609	4,531	2,790	935
121,567	101,053	33,382	20,581	12,540	5,257	4,305	2,587	845
1,505	1,164	657		135	65	60	29	
1,506	1,168	408	243	150	63	61	25	5
1,541	1,171	408	326	157	65	61	24	7
1,516	1,144	411	267	152	71	50	27	5
1,610	1,345	469	313	215	96	68	30	21
1,939	1,593	691	401	323	123	150	76	35
2,742	2,162	899	684	480	246	225	148	40
3,503	2,711	1,094	746	569	280	231	160	58
4,825	3,647	1,387	920	628	305	297	151	52
6,066	5,001	2,064	1,425	899	444	387	289	94
7,497	6,144	2,453	1,712	1,170	547	474	351	121
8,075	6,476	2,667	1,897	1,205	554	457	339	126
8,323	6,887	2,772	2,011	1,276	595	495	346	124
11,474	8,971	3,545	2,457	1,647	742	621	436	133
10,074	8,645	3,343	2,343	1,543	655	582	388	139
10,063	8,818	3,389	2,399	1,598	766	613	434	140
9,739	8,478	3,288	2,307	1,594	702	603	432	129
9,743	8,765	3,266	2,256	1,607	708	600	419	148
9,427	8,371	3,261	2,288	1,514	697	560	374	156

100,000	100,000 - x							Total
70,000 100,000	100,000 200,000	200,000 - x						
		200,000	500,000	1,000,000	2,000,000	3,000,000	4,000,000	
		500,000	1,000,000	2,000,000	3,000,000	4,000,000	x	
67	10							1,013,545
28	12							707,854
26	15							727,089
27	15							717,870
45	32							712,580
95	138							770,972
164	132	82						779,480
176	174	76						1,079,796
173	145	30		0	0	1	0	994,194
381	373	114	17	1	0	0	0	1,168,187
501	408	125	10	1	2	0	0	1,280,916
574	514	162	17	4	1	0	0	1,400,465
535	433	156	19	1	1	0	0	1,389,916
563	440	153	17	6	1	1	0	1,432,287
531	411	163	17	8	1	0	0	804,419
533	460	158	22	8	0	1	1	732,236
524	429	156	17	9	2	0	0	693,808
523	445	160	23	9	2	0	0	700,518
477	420	134	21	11	2	0	0	677,869
8	1							44,258
3	1							32,388
4	1							32,819
4	2							33,434
8	7							35,695
18	35							39,145
43	34	21						38,310
36	48	20						44,788
30	31	5	2	0	0	1	0	37,806
54	62	25	3	0	0	0	0	47,069
60	75	24	3	0	0	0	0	55,317
74	70	22	1	1	0	9	0	60,811
70	64	22	2	0	0	0	0	65,204
92	78	24	3	0	0	0	0	89,591
80	73	26	0	0	0	0	0	55,066
88	88	24	1	0	0	0	0	55,641
91	79	28	2	0	0	0	0	53,679
85	87	26	1	0	0	0	0	53,844
85	66	29	0	0	0	0	0	52,244

state of things. In Table No. 4 is given the totals of the tax-paying families belonging to the various grades (page 54—56).

On the basis of Table No. 3 and Table No. 4, I am going to make clear the disparity between the rich and poor in Osaka. It is necessary to take due note of the fact in connection with Table No. 3 that since 1920, 60 per cent. of the dividends have been included in C-class incomes for taxation throughout the country and that the area of Osaka was extended in 1925.

CHAPTER 4.

THE TENDENCY OF THE DISTRIBUTION OF INCOMES IN THE CITY OF OSAKA

One method of study sometimes adopted in analysing the statistics of the distribution of incomes is to fix a certain absolute amount as the standard. For instance, an income of ¥1,200 and one of ¥15,000 may be taken as forming the lines of demarcation, and the earners of incomes of less than ¥1,200 may be regarded as low-class people, those possessing or making between ¥1,200 and ¥15,000 as middle-class, and those of more than ¥15,000 as upper-class people. By this means, the number of the families belonging to these different classes may be compared to show the relative size of each class. This method is, however, too artificial. Moreover, these lines of demarcation require constant alterations, owing to revisions of the tax law, a rise or a fall in the prices of commodities and other causes. I did not, therefore, adopt the method. That which I did adopt was to compare the condition of the distribution of incomes in the city of Osaka with that of the whole country so as to discover how they differ from each other relatively. By this means I have tried to detect the features of the disparity between the rich and poor in Osaka. To this end, I have analysed the table of totals, in the first instance, and worked out the Pareto line in the second.

The amount of income		300—x		500—x			1,000—x		
		300—x	400—x	500—x	700—x		1,000—x		1,500—x
					700—x	800—x	1,000—x	1,200—x	
Japan	1912	1,013,545		451,942					151,825
	1913	707,854		472,819		277,825			157,711
	1914	727,089		498,033		292,781			165,491
	1915	717,872		476,649		278,751			157,017
	1916	712,580		466,860		274,258			155,810
	1917	770,972		522,521		312,977			180,592
	1918			779,480		439,013			252,919
	1919			1,079,796		695,984			397,135
	1920					994,194	628,610		325,154
	1921					1,168,187	785,420		417,936
	1922					1,280,916	892,759		478,517
	1923					1,400,465	953,659		518,332
	1924					1,389,916	930,678		502,692
	1925					1,432,287	986,079		529,299
	1926						804,419		518,362
	1927						732,236		488,816
	1928						693,808		470,494
	1929						700,518		477,239
	1930						677,869		461,465
Osaka	1912	44,258		20,771					8,528
	1913	32,388		21,553		13,754			8,667
	1914	32,819		21,759		14,084			8,629
	1915	33,431		20,755		13,556			8,574
	1916	35,695		22,724		14,792			9,365
	1917	39,145		26,780		17,964			11,538
	1918			38,310		24,568			16,199
	1919			44,788		31,599			20,656
	1920					37,806	26,911		17,205
	1921					47,069	36,064		23,068
	1922					55,317	43,021		27,923
	1923					60,811	46,385		29,965
	1924					65,204	49,187		31,492
	1925					89,591	67,316		41,989
	1926						55,066		39,252
	1927						55,641		40,064
	1928						53,679		38,743
	1929						53,844		38,992
	1930						52,244		37,775

Table No. 4.

Totals of tax-paying families belonging to the various grades.

2,000 x	3,000 x	5,000—x		10,000 x	15,000 x	20,000 x	30,000 x	50,000
		5,000 x	7,000 x					50,000 x
51,539	26,080	10,395		2,814	1,236	655	274	
52,940	27,137	11,059	5,933	3,049	1,353	714	291	86
55,440	28,557	11,660	6,371	3,267	1,458	771	304	98
52,500	26,877	11,012	5,946	3,021	1,345	708	280	90
53,147	27,641	11,329	6,246	3,222	1,475	812	368	157
64,572	34,456	15,045	8,790	4,916	2,498	1,555	821	380
93,174	51,148	23,564	13,824	7,783	4,106	2,532	1,341	610
139,120	75,295	33,721	19,393	10,671	5,516	3,398	1,735	721
203,190	104,276	44,466	25,522	13,787	6,967	4,182	1,927	694
275,321	155,343	69,240	41,040	22,988	12,266	7,692	3,955	1,598
312,922	174,718	78,189	46,817	26,510	14,094	8,854	4,618	1,895
342,459	193,263	88,271	52,951	29,863	15,992	10,189	5,324	2,327
335,031	187,469	84,361	50,220	28,141	14,835	9,350	4,865	2,063
348,298	194,552	87,302	51,886	29,079	15,256	9,565	4,954	2,134
333,176	196,612	87,128	51,355	28,707	15,022	9,476	4,881	2,088
317,115	186,827	83,202	49,195	27,798	14,869	9,377	4,857	2,091
307,933	182,563	81,476	48,110	27,246	14,381	9,045	4,704	2,034
314,873	187,897	84,084	49,677	28,141	15,027	9,418	4,887	2,097
303,182	181,615	80,562	47,180	26,599	14,059	8,802	4,497	1,910
3,624	2,119	955		298	163	98	38	
3,634	2,128	960	551	308	158	95	34	9
3,675	2,134	963	555	319	162	97	36	12
3,649	2,133	989	578	311	159	88	38	11
4,182	2,572	1,227	758	445	230	134	66	36
5,384	3,445	1,852	1,161	760	437	314	164	88
7,724	4,982	2,820	1,921	1,237	757	511	286	138
9,456	5,953	3,242	2,148	1,402	833	553	322	162
12,281	7,456	3,809	2,422	1,502	874	569	272	121
16,813	10,747	5,746	3,682	2,257	1,358	914	527	238
20,631	13,134	6,990	4,537	2,825	1,655	1,108	634	283
21,964	13,889	7,413	4,746	2,849	1,644	1,090	633	294
22,987	14,664	7,777	5,005	2,994	1,718	1,123	628	282
30,223	18,749	9,778	6,233	3,776	2,129	1,387	766	330
27,891	17,817	9,172	5,829	3,486	1,943	1,288	706	318
28,421	18,358	9,540	6,151	3,752	2,154	1,388	775	341
27,472	17,733	9,255	5,967	3,660	2,066	1,364	761	329
27,711	17,968	9,203	5,937	3,681	2,074	1,366	766	347
26,828	17,401	9,030	5,769	3,481	1,967	1,270	710	336

$-x$		100,000— x					
70,000 x	100,000 x	200,000— x					
		200,000 x	500,000 x	1,000,000 x	2,000,000 x	3,000,000 x	4,000,000 x
77	10						
40	12						
41	15						
42	15						
77	32						
233	138						
378	214	82					
426	250	76					
352	179	34	4	1	1	1	0
886	505	132	18	1	0	0	0
1,047	546	138	13	3	2	0	0
1,272	698	184	22	5	1	0	0
1,145	610	177	21	2	1	0	0
1,181	618	178	25	8	2	1	0
1,131	600	189	26	9	1	0	0
1,183	650	190	32	10	2	2	1
1,137	613	184	28	11	2	0	0
1,162	639	194	34	11	2	0	0
1,065	588	168	34	13	2	0	0
9	1						
4	1						
5	1						
6	2						
15	7						
53	35						
98	55	21					
104	68	20					
69	39	8	3	1	1	1	0
144	90	28	3	0	0	0	0
162	102	27	3	0	0	0	0
168	94	24	2	1	0	0	0
158	88	24	2	0	0	0	0
197	105	27	3	0	0	0	0
179	99	26	0	0	0	0	0
201	113	25	1	0	0	0	0
200	109	30	2	0	0	0	0
199	114	27	1	0	0	0	0
180	95	29	0	0	0	0	0

Table No. 5.

Ratio of the figures of Osaka to those of the whole country in the totals of families belonging to the various grades of incomes (permillage).

The amount of income	300—x		500—x			1,000—x			2,000 x	3,000 x	5,000—x		10,000 x
	300—x	400—x	500—x	700—x		1,000—x		1,500 x			5,000 x	7,000 x	
				700—x	800—x	1,000 x	1,200 x						
1912	44		46				56		70	81	92		106
1913		46	46	50			55		69	78	87	93	101
1914		45	44	48			52		66	75	83	87	98
1915		47	44	49			55		69	79	90	97	103
1916		50	49	54			60		79	93	108	121	138
1917		51	51	57			64		83	100	123	132	155
1918			49	56			64		83	97	120	139	159
1919			41	45			52		68	79	96	111	131
1920					38	43		53	60	72	86	95	109
1921					40	46		55	61	69	83	90	98
1922					43	48		58	66	75	89	97	107
1923					43	49		58	64	72	84	90	95
1924					47	53		62	69	78	92	100	106
1925					63	68		79	87	96	112	120	130
1926							68	76	84	91	105	114	121
1927							76	82	90	98	115	125	135
1928							77	82	89	97	114	124	134
1929							77	82	88	96	109	120	131
1930							77	82	88	96	112	122	131

The amount of income	15,000 ↓ <i>x</i>	20,000 ↓ <i>x</i>	30,000 ↓ <i>x</i>	50,000— <i>x</i>		100,000— <i>x</i>						
				50,000 ↓ <i>x</i>	70,000 ↓ <i>x</i>	100,000 ↓ <i>x</i>	200,000— <i>x</i>					
							200,000	500,000	1,000,000	2,000,000	3,000,000	4,000,000
							↓ <i>x</i>	↓ <i>x</i>	↓ <i>x</i>	↓ <i>x</i>	↓ <i>x</i>	↓ <i>x</i>
1912	132	150	139	177		100						
1913	117	133	117	105	100	83						
1914	111	126	118	122	122	67						
1915	118	124	136	122	143	133						
1916	156	165	179	229	195	219						
1917	175	202	200	232	227	254						
1918	184	202	213	226	259	257		256				
1919	151	163	186	225	244	272		263				
1920	125	136	141	174	196	218	235	750	1,000	1,000	1,000	—
1921	111	119	133	149	163	178	212	167	0	—	—	—
1922	117	125	137	149	155	187	196	231	0	0	—	—
1923	103	107	119	126	132	135	130	91	200	0	—	—
1924	116	120	129	137	138	144	136	95	0	0	—	—
1925	140	145	155	155	167	170	152	120	0	0	0	—
1926	129	136	145	152	158	165	138	0	0	0	—	—
1927	145	148	160	163	170	174	132	31	0	0	0	0
1928	144	151	162	162	176	178	163	71	0	0	—	—
1929	138	145	157	167	171	178	139	29	0	0	—	—
1930	140	144	158	176	169	162	173	0	0	0	—	—

The distribution totals of the C-class incomes will be seen from Table No. 4, which shows the totals of tax-paying families belonging to the various grades. By dividing the number of families earning incomes of over each standard in the city of Osaka by the number of such families in the whole country, I have obtained Table No. 5 showing permillage. Take the case of the number of families earning more than ¥1,200 in 1930, as given in Table No. 4, for instance. As the number of such families in Osaka is 52,244 against 677,869 in the whole country, the permillage given in Table No. 5 is 77. As regards the families with an income of over ¥70,000 in the same year, their number in Osaka is 180 against 1,065 in the whole country, and consequently a permillage of 169 is given in Table No. 5 (page 57—58).

Table No. 5 shows that the ratio of the tax-paying families in Osaka to those of the whole country was 38 to 51 per mille, prior to the extension of the area of the city, and 63 to 77 per mille, after the extension of its area. As the amount of the incomes increases, the ratio of the tax-paying families in Osaka to those in the whole country rises, and when a certain limit is reached, the ratio declines. That is to say, as compared with the whole country, the families with medium incomes are most numerous in Osaka, and then come the families with big incomes and those with small incomes in order. The following table shows the five grades of tax-paying families in Osaka embodying the high ratio in permillage to those of the whole country during the past nineteen years:—

Year	Grade taking first rank	Grade taking second rank	Grade taking third rank	Grade taking fourth rank	Grade taking fifth rank
1912	¥20,000—x	¥30,000—x	¥15,000—x	¥50,000—x	¥10,000—x
1913	¥20,000—x	¥30,000—x	¥15,000—x	¥50,000—x	¥10,000—x
1914	¥20,000—x	¥50,000—x	¥70,000—x	¥30,000—x	¥15,000—x
1915	¥70,000—x	¥30,000—x	¥100,000—x	¥20,000—x	¥50,000—x
1916	¥50,000—x	¥100,000—x	¥70,000—x	¥30,000—x	¥20,000—x

1917	¥100,000—x	¥50,000—x	¥70,000—x	¥20,000—x	¥30,000—x
1918	¥70,000—x	¥100,000—x	¥200,000—x	¥50,000—x	¥30,000—x
1919	¥100,000—x	¥200,000—x	¥70,000—x	¥50,000—x	¥30,000—x
1920	¥3,000,000—x	¥2,000,000—x	¥1,000,000—x	¥500,000—x	¥200,000—x
1921	¥200,000—x	¥100,000—x	¥500,000—x	¥70,000—x	¥50,000—x
1922	¥500,000—x	¥200,000—x	¥100,000—x	¥70,000—x	¥50,000—x
1923	¥1,000,000—x	¥100,000—x	¥70,000—x	¥200,000—x	¥50,000—x
1924	¥100,000—x	¥70,000—x	¥50,000—x	¥200,000—x	¥30,000—x
1925	¥100,000—x	¥70,000—x	¥50,000—x	¥30,000—x	¥200,000—x
1926	¥100,000—x	¥70,000—x	¥50,000—x	¥30,000—x	¥200,000—x
1927	¥100,000—x	¥70,000—x	¥50,000—x	¥30,000—x	¥20,000—x
1928	¥100,000—x	¥70,000—x	¥200,000—x	¥50,000—x	¥30,000—x
1929	¥100,000—x	¥70,000—x	¥50,000—x	¥30,000—x	¥20,000—x
1930	¥50,000—x	¥200,000—x	¥70,000—x	¥100,000—x	¥30,000—x

As will be seen from the above table, the highest ratio was at first recorded in respect of the families with incomes of between ¥10,000 and ¥50,000, but during the European war those with incomes of ¥20,000 to ¥100,000 became predominant, while towards the end of the war, the gravity shifted to the families with incomes of between ¥30,000 and ¥200,000. After the war, the families with incomes of over ¥200,000 showed the highest ratio at one time, but there was subsequently a gradual levelling down, until the highest ratio is now shown in the families with incomes of from ¥20,000 to ¥100,000. One prominent feature of Osaka which was maintained during the last nineteen years is that the families with medium incomes have invariably stood at the head of the list.

The following table shows the comparison of the figures of Osaka with those of the whole country according to the Pareto line of the distribution of incomes:—

	$\log N = \log A + \alpha \log x$			
	$\log A$		α	
	The whole country	Osaka	The whole country	Osaka
1912	10.9459381	9.0581420	1.9132	1.6935
1913	10.9386192	9.1872344	1.9026	1.7295
1914	10.9169886	9.1085535	1.8890	1.7031
1915	10.9009213	8.9965652	1.8908	1.6686
1916	10.5440197	8.4566736	1.7773	1.4792
1917	10.0022037	7.8592154	1.5785	1.2552
1918	10.2661961	7.9707298	1.5959	1.2357
1919	10.4520877	8.1336948	1.6117	1.2615
1920	11.4655369	8.9228733	1.8481	1.4545
1921	11.2265396	8.8056599	1.7388	1.3829
1922	11.3467462	8.9852186	1.7495	1.4099
1923	11.2836309	9.3619772	1.7230	1.5068
1924	11.3925494	9.2500270	1.7585	1.4726
1925	11.2565581	9.4130511	1.7141	1.4870
1926	11.3002069	9.2625479	1.7236	1.4459
1927	11.1329770	9.7182603	1.6813	1.5650
1928	11.0684800	9.5299860	1.6700	1.5168
1929	11.0620702	9.6574257	1.6649	1.5517
1930	11.0296850	9.1934241	1.6619	1.4294

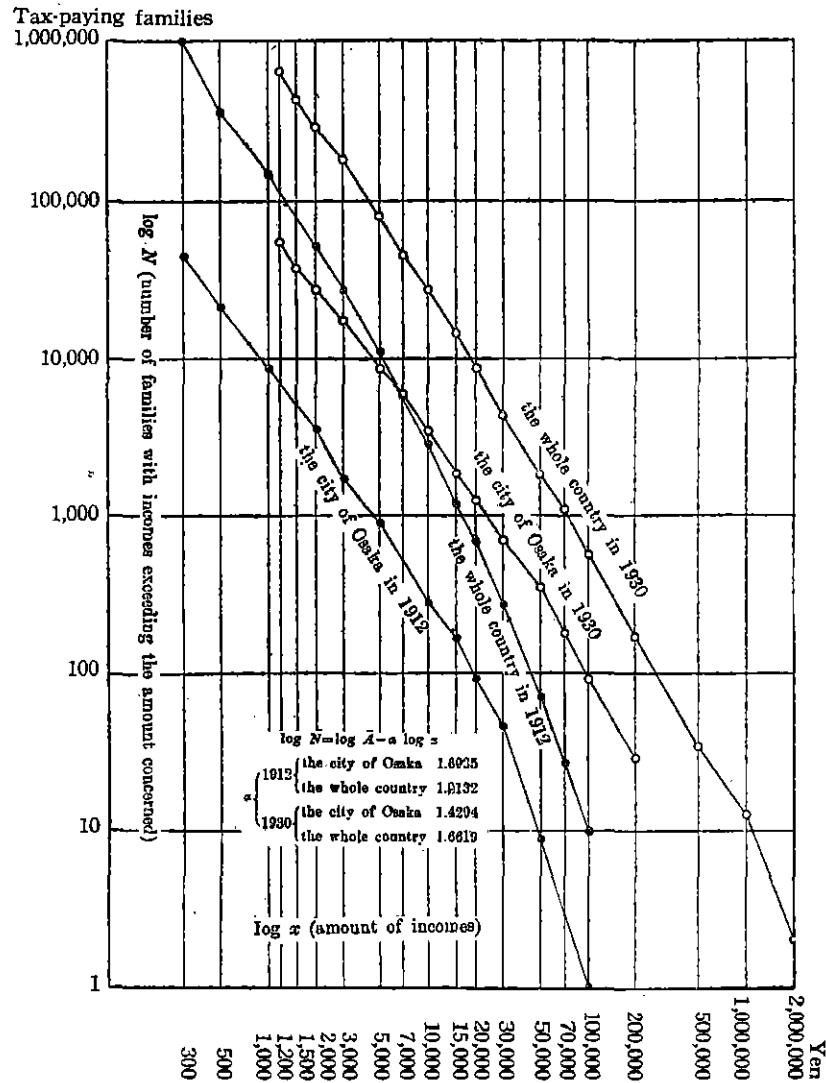
The method of measuring the disparity between the rich and poor by means of the Pareto line was first introduced in this country by Dr. Takada.⁶⁾ In the scientific world in Europe, this method is often used.⁷⁾ The practical value of the Pareto line to the present study consists in the fact that by the use of the α the relative tendency of the disparity between the rich and poor in the city of Osaka and in the whole country can be made clear. The table of totals shows

6) op., cit.,

7) Moore, *The Statistical Complement of Pure Economics*, p. 26—27. (*The Quarterly Journal of Economics* 1909).

Shiomi, *Die Entwicklung des Volkseinkommens in Japan in den Jahren 1903—1919*. (*Archiv. für Sozialwissenschaft und Sozialpolitik* Band 53, Heft 1.)

that the α of Osaka is always smaller than that of the whole country. In other words, Osaka has comparatively many families with medium incomes and comparatively few families with small incomes. The difference existing between the α of the whole country and that of Osaka is not always the



same. For instance, the Pareto line for the whole country and for the city of Osaka in 1912 and in 1930 is shown in the foregoing diagram (page 62):—

CHAPTER 5. DISPARITY BETWEEN THE RICH AND POOR IN BIG CITIES

In the foregoing Chapters, I have described the results of inquiries made into the statistics of the distribution of C-class tax-paying families in Osaka, with comparison with those of the whole country, with the object of making clear the disparity between the rich and poor in the big cities. Through these inquiries, I have discovered prominent features of the disparity between the rich and poor in the big cities.

I must mention in this connection that the statistical materials that I have made use of are the statistics of the C-class income tax in Osaka, and this fact requires due attention to be given to the following points:—

1. Is it proper to take the city of Osaka as typical of the big cities? Up to 1924, the city of Osaka was confined to its old area, but in 1925, it annexed the neighbouring towns and villages to form the present Great Osaka. This extension of the area of the city must have affected the condition of the disparity between the rich and poor, and from this point of view, the choice of Osaka as the object of study may appear to lack pertinence. But it must be noted, on the other hand, that while Tokyo is a political city, Osaka is an economic city, pure and simple. Viewed from this standpoint, the choice of Osaka for the purpose of studying the disparity between the rich and poor in big cities may well be regarded as altogether apropos.

2. Again, the fact that the C-class income was taken as the materials for measuring the disparity between the rich and poor renders it necessary to take the following points into due consideration:—

(a) As the materials used are tax statistics, they do not include items which are either properly or improperly excluded from the scope of such statistics. For instance, the incomes on which taxation was illegally evaded are excluded, nor do the statistics include the incomes of less than the minimum taxable point or the interest on national bonds which is legally exempted from the income-tax.

(b) The incomes, which, though taxed as A-class or B-class incomes, are not taxed as C-class incomes, are also excluded from the statistics. The profits of juridical persons on which no dividend was declared, the interest on local loans, and the interest on fixed bank deposits are left out of consideration in the present study of the disparity between the rich and poor.

(c) Even in regard to C-class incomes, where only part of the incomes is taxed under the tax law, that part only is taken into account in the present study. Under the tax law in force, 40 per cent. of the dividends declared by juridical persons is excluded from the C-class incomes for taxation, while 20 or 10 per cent. is deducted from smaller incomes from services for assessment. The life insurance premium is also deducted to the amount of ¥200, and a deduction of ¥100 per head of dependants is made from smaller incomes.

When these points are taken into due consideration, it will be seen that the mere statistics of the distribution of C-class incomes in the city of Osaka do not necessarily furnish an accurate criterion by which to measure the disparity between the rich and poor in big cities, but in the absence of any other suitable statistical materials, they, no doubt, commend themselves as the best available.

It is very important for anybody who handles an economic problem of any kind to form an accurate idea of the disparity between the rich and poor in this country. Especially is it necessary to gain a good knowledge of the state of the disparity between them in big cities, which take the lead in modern social life. In spite of its great importance,

the matter has hitherto been almost entirely neglected. In the present article, I put this important problem before the scientific world of statisticians in hopes of receiving valuable suggestions from those interested in the study.

In conclusion, I wish to record my gratitude to Mr. Chotaro Takeda, of the Kyoto University Hall, who gave me much help in the present study.

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