

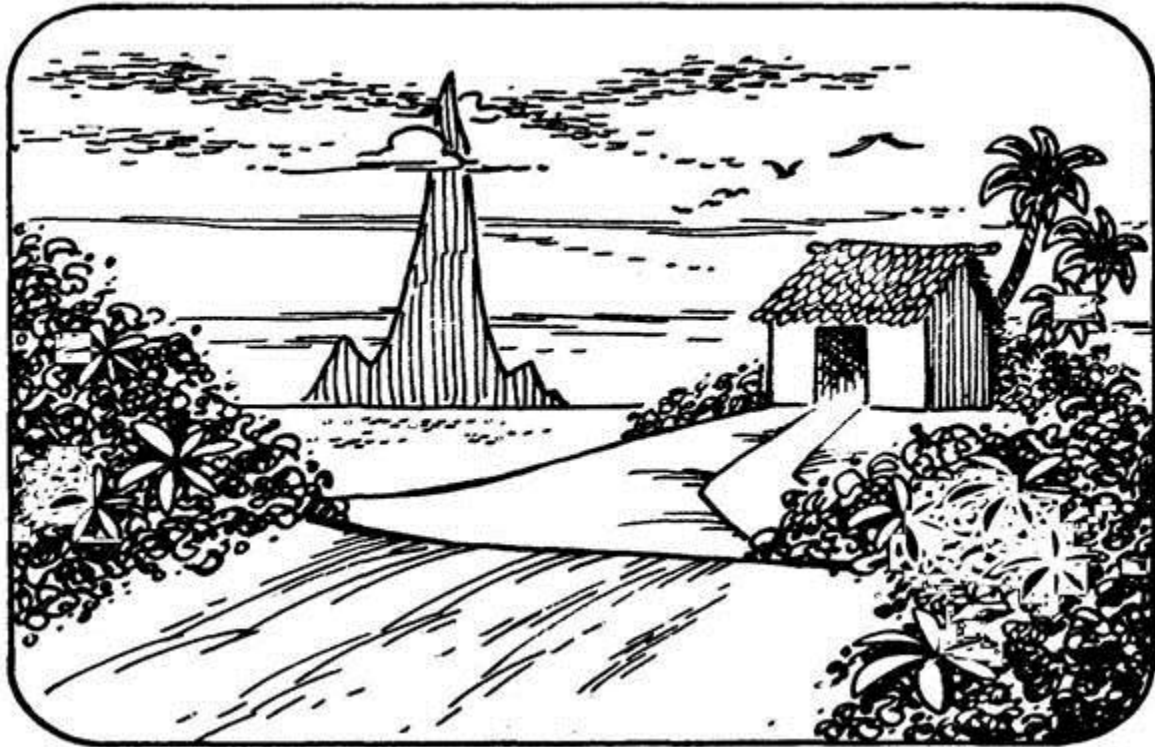
LIFE ON PARADISE ISLAND

ECONOMIC LIFE ON AN IMAGINARY ISLAND

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The Setting



The setting of this story is a tropical island far away in the ocean. It does not matter which ocean, because the story is imaginary.

The name of the island is Paradise. It is one of a group of several islands. Each island is a separate nation, inhabited by a single tribe of people; all the tribes speak, read, and write the same simple language. The people on Paradise Island belong to the Jubilant Tribe. Even though the different tribes speak the same language, they do not mingle or trade with each other because when they get together there is always a fight.

The people of Paradise Island do not have any money. In fact, they have never heard of money and have given no thought to it because they do not need money.

Each family or household raises or gathers its own food from the forest, the fields, and the ocean. A household consists of a family unit or an individual living alone. Each household provides its own clothing, simple as it is. Huts with thatched roofs are made by the family, sometimes with the help of neighbors. People make their own simple tools and anything else they need.

Every family takes care of its aged members. If the parents of one family become ill, other families take care of the children. If the parents of one family die, other members of the tribe adopt the children.

Households of the tribe on Paradise Island are spread over a rather large area because the island is a big one. It has many wild fruits and berries on it. On some parts of the island certain fruits and berries grow plentifully, but they are scarce in other locations.

One day the Jumbo family was eating lunch and found that they had only bananas and no pineapples. In fact, they had more bananas than they cared to eat. Then Stubby, a member of the Jumbo family, got an idea. He knew that Bosko, who lived in the hut next door, had a good supply of pineapples, but no bananas. So Stubby went next door and talked to Bosko. Bosko agreed to trade two pineapples for a stem of bananas.

The news of this trade spread throughout the island. Other people started to trade goods which they had plenty of for goods which they needed. This is how barter got started on Paradise Island.

The trade that resulted gave Stubby another idea. He never had liked to hunt or fish, and he did not like to seek his own food in the forest or fields. He liked to make things, especially sandals. Stubby talked to his friends and suggested that if they would bring him food, he would make sandals for them. This was a new experience for them, but it sounded like a good idea because some of them had not been able to make good sandals, and they liked to hunt and fish. So they agreed.

Stubby's success caused other members of the tribe to want to do only the things they liked to do and which they did best. Soon one family was making clothes, one was making tools and weapons, one grew rice, one grew vegetables, and another family built huts. These families traded among themselves, but some other families continued to be independent and do all their own work.

The new system was in operation only a short time before most people realized they were living better doing just about the same amount of work that they had always done. Since person often worked all day at a task—such as making sandals, he became more efficient and as a result he made more goods than he had been able to make before. So there now were more goods available for people.

Stubby soon learned that he could produce better sandals if he spent some time improving his tools and equipment.

“That’s a capital idea,” Bosko exclaimed when he saw the tools Stubby had designed. So it happened that all goods, such as tools, which were used in the production of other goods, were called capital goods, or capital, for short.

All goods used directly by members of the tribe, such as clothing, food, or huts, were called consumer goods.

Persons who used these goods were called consumers. Persons who produced either capital or consumer goods were called producers.

All of the members of the Jubilant Tribe were, of course, consumers, because every person used food and clothing and other consumer goods. But not everyone was a producer; some were too old, too young, or too feeble. Most households, however, had one or more producers. The producers did not leave home to “go to work,” since most of the production was done by Families in their homes or their fields.

Mike, the Specialist

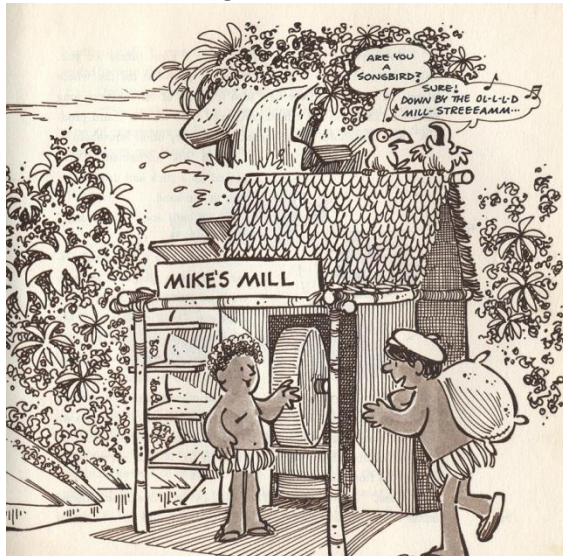
Mike had been watching the *system* of trading, and it gave him an idea. He saw how busy people were, doing their special work. And after they took rice in trade for other goods, they had to grind it before they could make bread from it.

On his wedding day, Mike announced before the assembled tribe that he was going to start something new—a rice flour mill. There was a waterfall on the island, and for some time Mike had been working with simple tools, his capital, to construct a water wheel that operated two stones for grinding rice into flour. Now he asked people to bring their rice to him to be ground.

At first, members of the tribe had doubts about any business where the producer had to leave his home to carry on production. More than that, Mike was not actually going to produce a product like sandals. He offered to produce a service, grinding rice into flour.

One day, however, when Mike was standing in the doorway mill, his friend Oscar came hurrying along with a sack his shoulder.

I have been so busy today that I haven't had time to grind rice," said Oscar. "I've been wanting to see if your new mill really works. Can you grind this rice for me right away?" "That is why I'm here," said Mike. "You can be my first customer!" He took the sack of rice from Oscar's shoulder and divided it into several smaller bags. Inside the mill he showed Oscar a round bowl.



"I'll keep one bowl of rice for every bag of rice I grind," he explained. "Since I am giving you a service, this bowl of rice is what you will give me in trade."

"That sounds like a good idea," said Oscar. "It's worth that much to me to get the rest of the rice ground."

The next day, three other people brought rice to the mill to be ground. Each of them said that Oscar had told them how fast Mike could grind their rice for them. That afternoon Oscar stopped at the mill again. "Thank you for telling people about the mill," Mike said. "I need all the customers I can get to help my mill get started."

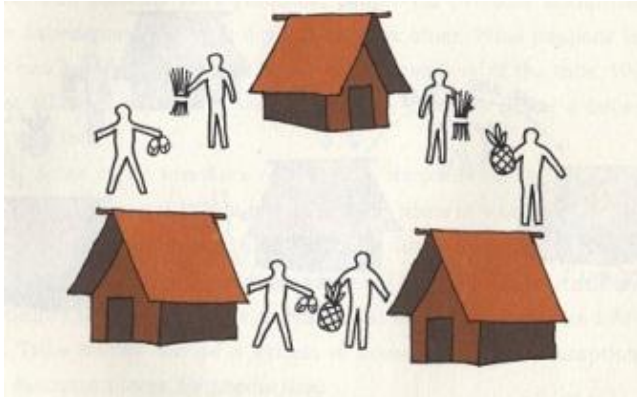
"I was glad to do it," Oscar said. "I think you have a wonderful idea with this mill. You ground my rice so much faster than I could do it at home. Just think of the extra time I will have if I always bring my rice here to be ground. I'll be able to earn enough to pay you for grinding it, and more besides."

Mike grinned at him. "That was my idea. I help others get their work done faster, and I can eat some of the rice they give me for doing it, and trade the rest of the rice for other things I need."

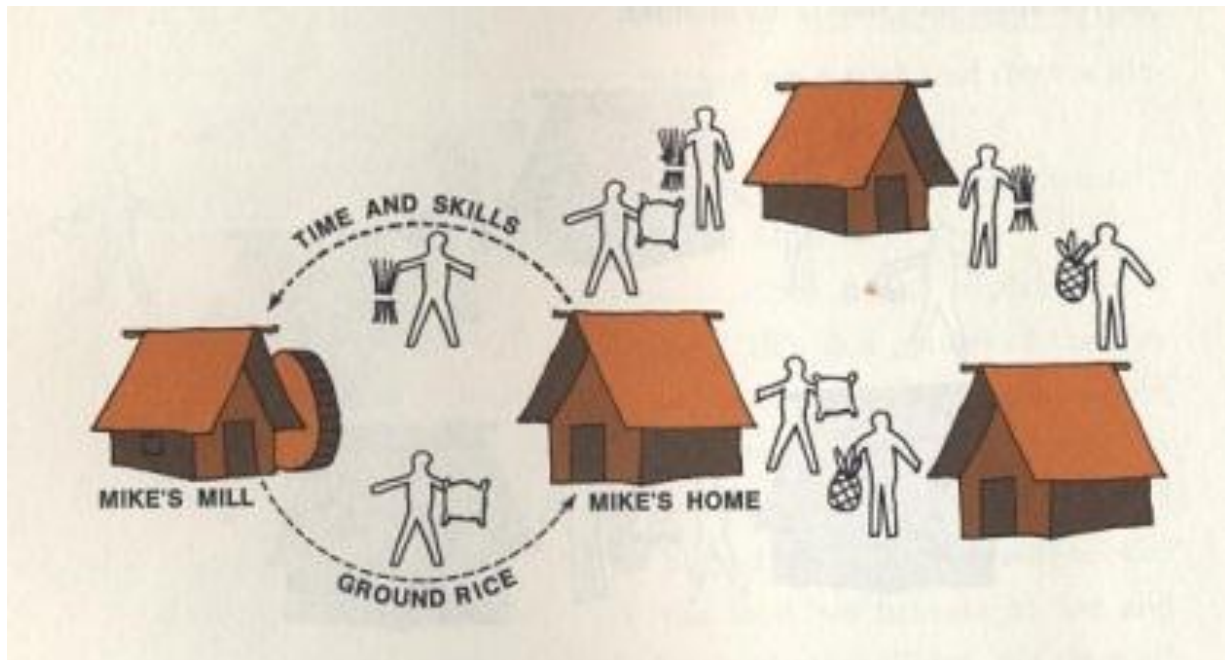
"I see a great future for you, Mike," Oscar exclaimed. "And not only for you—but for the whole island! This is an entirely new idea for most of us. Not very long ago each family on the island consumed only what it could produce. Each household was independent of every other household." See here," explained Oscar. "This is a picture of the way we lived a short time ago. I would hunt and fish and grow rice.



My little daughter gathered fruit and helped her mother. My wife cooked the food we brought to her and made our clothing from animal skins and other things. We were all producers. The three of us ate the food and wore the clothing, so we were all consumers. Only the food and other items produced by members of our family were consumed by us. We did not get goods or services from anyone else." "Yes," said Mike. "Then Stubby and Bosko introduced barter, and some people didn't have to go hunting anymore. You grew rice and traded it with men who liked to hunt. "This is the way we were living." Oscar drew another picture. "We were all consumers, and most of us were producers, too, but things moved from one family to another."



"Now I am trying to figure out where your rice mill fits in the picture. Before, both the consuming and the producing were done in our homes. Now you come here to the mill every day where you produce the service of grinding rice. People give you rice which you trade for the goods you need. When you go home at night you consume the goods made possible from your work at the mill. I guess we will have to show it this way."



Mike agreed, "Yes, that is right. I still barter with the other people on the island, but the rice I use to barter comes from my work at the mill."

Oscar looked at his drawing. "Look at the picture. You are a special person on the island now, Mike. You have a special place to do your work and you produce a special service. Mike," he exclaimed, "you really are a specialist!"

Mike laughed. "That's right, Oscar, I'm a specialist in grinding rice into flour. Many other members of the tribe are also specialists. Stubby's specialty is producing sandals. Some of the tribesmen specialize in hunting and fishing. Because of specialization, we are now able to produce more goods and services on the island."

"There is one other change," Oscar explained. "Now each family or household is dependent on how well other families perform their specialties. Since families no longer produce all goods and services they consume, people on Paradise Island are now interdependent—they depend on each other."

What happens to any one family is important to all of the members of the tribe. We must all work together if we are to make Paradise Island a better place to live."

Some other members of the tribe decided that Mike had a good idea in separating his home from his place of work. They, too, began to use their homes for leisure and for consuming the goods they earned by working at their places of business. Some families continued to produce goods at home, but more and more the Jubilant Tribe moved toward a system of households for consumption and business places for production.

As more people specialized, production increased. For example, Mike was able to grind much more flour in his mill than each family could do alone. But in exchange for the increased production, people had to give up some of their independence. They now had to depend on each other for many of the goods and services they needed.

Some members of the tribe worried about this growing interdependence. They felt they were no longer free to do things for themselves, and they looked back longingly at the days when each family provided for all its needs. But most tribe members approved of the new system, since they were living better than they had in the past.

Sometimes people gave Mike items such as bananas, sandals, or tools in return for grinding their rice, instead of having him keep a portion of their rice. Mike soon found that he had a lot more rice and certain other items than he needed. He put items he did not need on display, and when people came to have their rice ground, he traded with them for things he needed.

Mike's flour mill soon became a place where people gathered to trade with Mike and other friends. Mike collected quite a supply of various items and he found himself in two kinds of businesses—the flour milling business and the trading business. He put up a sign, "Mike's Mill and Trading Post."

New Tools and Private Property



As time went by, the population of Paradise Island increased and it became more difficult for the tribesmen to find enough wild fruit and other food to take care of their needs. At times there was a shortage of food. The people worried about this and tried to find better ways to obtain food. Those who had become specialists kept trying to improve their products and to make new products. Matthew, who was a respected and successful farmer, discovered that by cultivating a pineapple patch near his hut he could grow more and better pineapples than would ordinarily grow wild. But he did not have very good tools and there was not much cleared land.

He decided that his first job was to clear the land, so he made some crude ropes and used oxen to pull down and drag away some trees. Then he went to see a toolmaker named Bernard. Together they worked out a design for a simple plow, and Bernard made the plow and some other hand tools for him. Matthew plowed the land, tended the plants, and soon had beautiful patch of pineapples.

The neighbors watched Matthew with interest and were soon following his example in planting and cultivating pineapples and other kinds of fruits and vegetables. A man named Baldy improved on Matthew's idea for rope, and soon he couldn't make rope as fast as he could sell it. Paul became a specialist in training oxen, and Bernard sold many plows.

The increased farm production made more food available and people began to live still better. Tools and machines increased the ability of the tribe to produce the things it wanted. There were more goods available for everyone.

One member of the tribe, who was called Flashy Gordon, did not like to hunt or fish or work in a garden. He liked to trade with other people. In his trading he usually was able to gather products that people wanted and then exchange them with other tribesmen for things that he needed. He decided to

expand his business by obtaining a cart, oxen, and a boat. He could then go to different parts of the island and gather materials for his growing trading business.

One day a member of the tribe called Lazy Jay went to Gordon and said, “Flashy, I don’t have a cart. Will you haul these bananas to the village for me?”

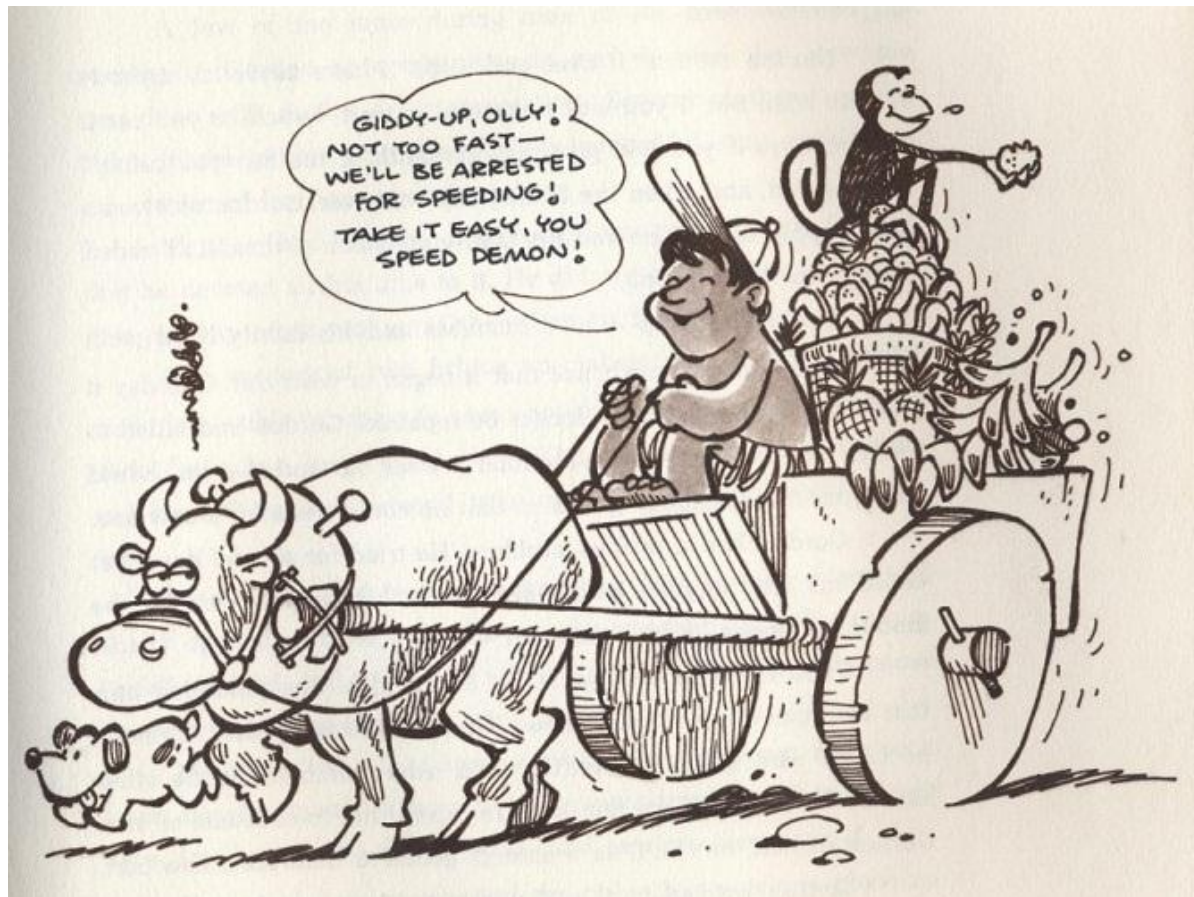
Gordon said, “Yes, I’ll be glad to haul the ten stems of bananas, if you will let me have one of them for my services.” The agreement was reached, and Gordon had one stem of bananas that he could either eat or trade.

This experience gave Gordon the idea of trying to encourage others to use his services, and soon he found himself very busy hauling for others as well as operating his trading business.

Two friends came to him one morning and said, “Flashy, we have made a new net and want to go fishing. May we use your boat?”

Gordon thought it over and said, “I have never let anybody use my boat. But if you will be careful with it, I’ll let you use it for two days if you will give me one tenth of the fish you catch.” They agreed, and when the fishing trip was over, Gordon received a good supply of fish. He and his family ate some of them and traded the rest for other goods.

Gordon built up a good business and his family lived well, but his cart had so much use that it began to wear out. One day it broke down and could no longer be repaired. Gordon had failed to realize that the cart would eventually wear out and that he should save enough goods so that he could trade for a new one



Gordon had a serious problem. He tried for several days, but could not find anyone who would trade him a new cart for the amount of goods he had managed to save.

Then his wife, Happy, had a bright idea. She reminded him that his boat was still quite new. If he worked hard with the boat, he could earn goods by trading with tribe members on the other side of the island. If the family were careful not to consume all that Gordon earned, he could save enough goods to trade for a new cart.

Gordon worked hard and within a short time he had saved enough goods. From then on he remembered that he had to save part of what he earned so that he could replace his equipment as it wore out.

A few of the more daring men of the tribe watched the success of Gordon as a businessman and decided that they too would go into business for themselves. Several of them opened stores where goods were traded. Others worked full time performing the service of hauling goods for others.

Matthew had become so successful by specializing in farming that he devoted all his time to it. He did not hunt or fish any more, or make any other product. Others became farmers, too.

The success of two fishing specialists, Big Joe and Charlie made it possible for them to save enough from what they earned to trade for a fine, large fishing boat. Others followed their example and soon there were several tribe members who did nothing but fish.

One family had been experimenting with making paper and finally opened a paper mill. Soon paper was being widely used on Paradise Island, and the family which produced it could trade paper for everything it needed.

People on the island became even more dependent upon each other, because many of them were so specialized that they did not have time to provide all the goods and services they needed.

But specialization was not the only change taking place on Paradise Island. Another change concerned land.

For many generations there had been plenty of land on Paradise Island for everyone. When a young couple got married, they simply built a hut on a portion of the island not being used. No one ever doubted their right to do so. Land was free and available for everyone. But as Matthew and others began to cultivate land, and as the population grew, land became scarce. There was not enough land for each tribesman to have all he wanted.

Eventually, the population on Paradise Island increased to the point where arguments over land began to arise. These arguments were taken to Solomon, the chief of the tribe, for settlement.

But there were no rules governing land because there had never been any need for rules.



One day, Chief Solomon listened to the story of Peter and Greta who had been living on a patch of land for several years.

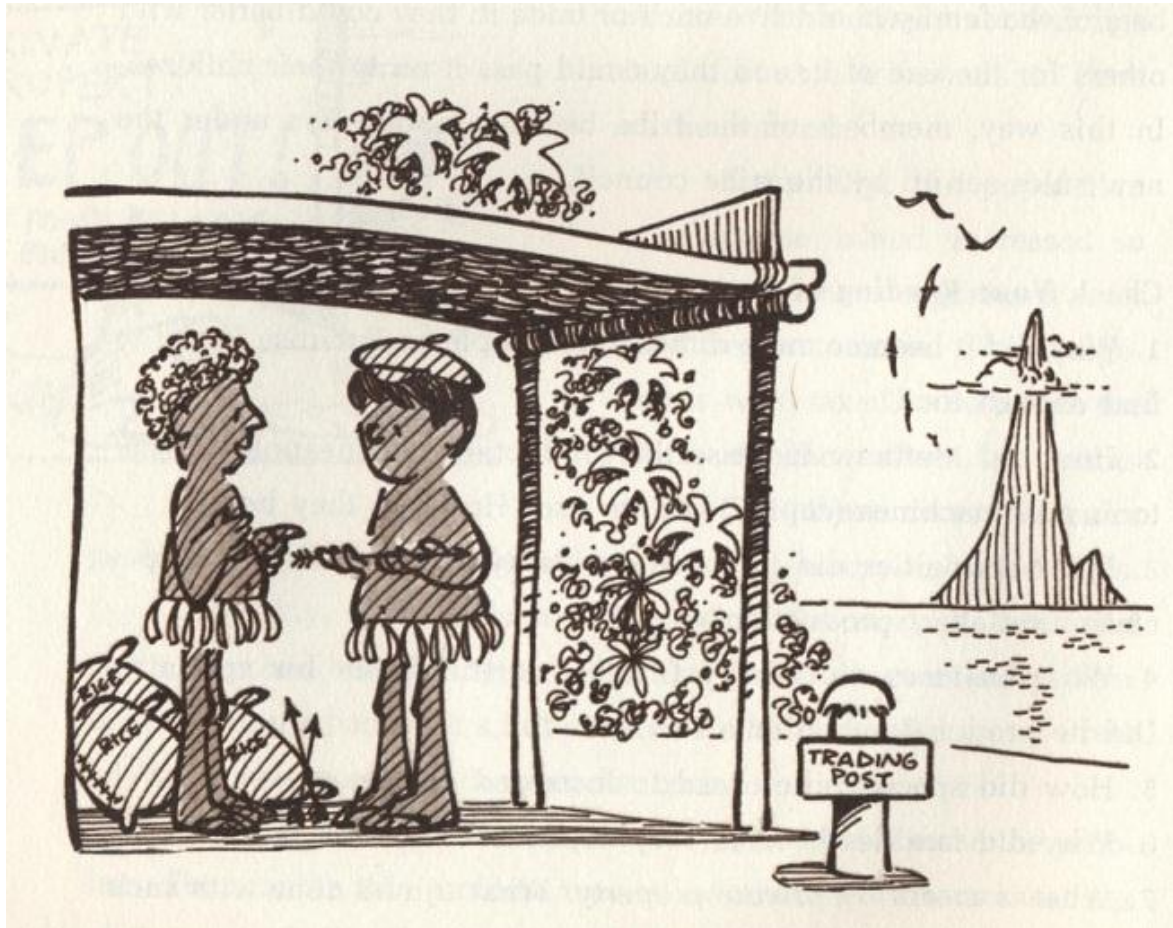
Now another couple had built a hut so close to theirs that Peter and Greta felt there was not enough room for both families.

Solomon called the tribe council together to discuss the problem. For months this problem was talked about at meetings of the council. Finally it was decided that the only way to solve the problem was to establish some rules about land.

The council ruled that each family would be given the patch of land which it now occupied. All other lands belonged to the tribe and would be controlled by the tribe council. When a couple got married, the council would give them a patch land.

The land of each family became its private property. Members of the family could live on it or trade it; they could barter with others for the use of it; and they could pass it on to their children. In this way, members of the tribe became landowner under the new rules set up by the tribe council.

Wages and Profits



Mike's Mill and Trading Post became a very busy place. But families who were working hard producing goods and services in their own businesses found that they were wasting quite a bit of time at Mike's trying to find people to trade with.

Oscar said to Mike one day, "I would like to trade these hunting arrows for some rice, but I don't want to wait here at the Trading Post until I can make a trade." This gave Mike an idea. He said to Oscar, "I will give you four bags of rice for your hunting arrows and then you will not have to wait here to find a customer."

Oscar thought this over carefully. He was quite sure that he could get at least five bags of rice if he were to wait and make the trade himself. However, he decided that in the time that he would have to spend waiting he could earn more than one bag of rice.

Mike was not sure how the idea would work out, since he had never before purchased goods for the sole purpose of reselling them. He decided that if he got more than four bags of rice in reselling the arrows, he would call the extra rice a profit. But if he got less rice when he resold the arrows, he would call it a loss.

Within two days Mike was able to sell the hunting arrows for six bags of rice. The business risk that he had taken had paid off; he had been a successful entrepreneur in that he had organized and managed a business, taking the risk of loss, or getting a profit. Mike was now better off by two bags of rice than he had been before his deal with Oscar.

Mike had begun to keep track of his business dealings in a ledger. Now he was about to record in the book two bags of rice as his profit, but then he thought more carefully about his deal with Oscar. He realized that this was different from his usual business. Usually people brought rice to him and he would grind it into flour and keep some rice for his services. Mike reasoned that if he had not taken the time to talk to customers about the hunting arrows, he probably could have earned a bag of rice by grinding flour for other people. But he had sold the arrows he bought from Oscar for two bags of rice more than he paid for them, so he was still better off by one bag of rice. He decided that only the extra bag should be called profit. In other words, selling time must be considered when determining profits or losses. Mike had a good sense for business, and as a successful entrepreneur he made more profits than losses on the business risks that he took. His business continued to grow, and he soon found that it was not possible for him to handle all the details of the business alone. At first he had his wife, Pat, help him, but even with Pat's help there was more work than they could handle.

Late one afternoon six ladies were waiting in line in front of the Mill and Trading Post with rice to be ground for their evening meal. Sixteen people were inside trying to trade bananas, sandals, and tools with Mike. Both Mike and Pat were so busy that they couldn't help the ladies who were waiting.

Bosko, who was walking by and saw Mike's predicament called out, "I know how to run your mill, Mike. Should I grind the rice for these ladies?"

"That would be a big help, Bosko," shouted Mike.

After all the customers had gone home, Mike went into the mill and found Bosko still busy cleaning up.

"I seem to busier here every day," Mike said. "That was nice of you help me out."

"I was glad to do it," said Bosko. "It's fun to run your mill."

"I've been thinking that I should get someone to help here," said Mike. "Look, Bosko, if you will work for me here running the mill and helping out in the Trading Post, I'll you five bags of rice a week."

"You mean every week, whether your business is as o it was today or not?" exclaimed Bosko.

"That's right," said Mike. "Some days business is much better than others, and I'll just have to be sure to save enough from the busy times so I can pay you when we have poor ones. You will receive five bags of rice every week as your wages. "

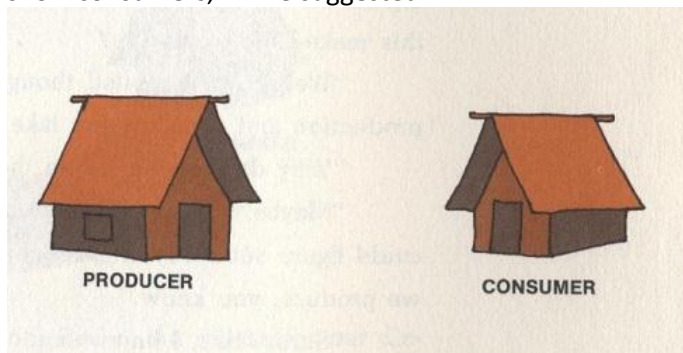
Bosko was so pleased with the idea of a regular income Mike started thinking about his own income. It occurred to that if he did not have his own business, he too could work for someone else just as Bosko was working for him. He wondered what wage he could earn, and decided, probably the amount that he was paying Bosko—five bags of rice a week. Mike decided that he should pay himself this wage. If his income from the business turned out to be more than five bags a week, the extra would be called profit. If his income was less than five bags a week, this would be called a loss. And he would record in his ledger the payments to himself and to Bosko, and any profit or loss.

Consumers, Producers, and Income



Mike and Bosko were so pleased with the development of specialized businesses on Paradise Island that they decided to draw a diagram to show how the system worked.

"First, let's draw a picture of a business firm to show producers, and a picture of a hut, or household to show consumers," Mike suggested.



"That's easy," Bosko said as he began to draw. "They could look like this."

"Now," Mike continued, "the firm you drew, Bosko, represent *all* production on the island, and the hut, or hold, can represent *all* consumption."

"You mean pretend that all production on the island takes place in one big building and all the people on the island live in one big hut?" Bosko asked.

"Well, almost," Mike continued. "Actually a firm is place where production takes place. It doesn't really have to be a building. Matthew the farmer would need a mighty big building to cover his pineapple patch."

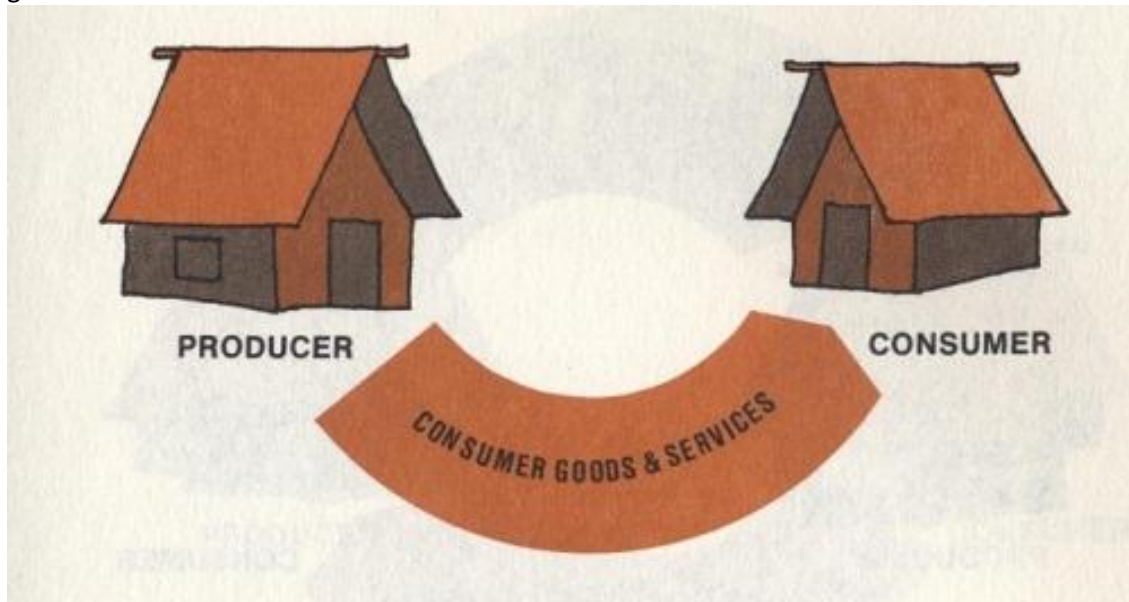
Bosko chuckled. "Yes, and we would need a pretty big hut to house all the people on the island. Why are we doing this make-believe anyway?"

"Well," Mike replied, "so we can see how production and consumption take place for the *entire* island. Maybe if we knew more about how the system works, we could figure out a way to produce more."

"Well," Bosko said, "Stubby produces sandals, Bernard makes plows, Baldy produces rope, Matthew grows pineapples, we provide the service of grinding rice into flour. That lot to write on our diagram, Mike, and I haven't even mentioned half the people who are producers."

"Why don't we shorten it a bit, Bosko?"

"Well, since all of the goods and services are for consumption we could simply call them consumer goods and services."

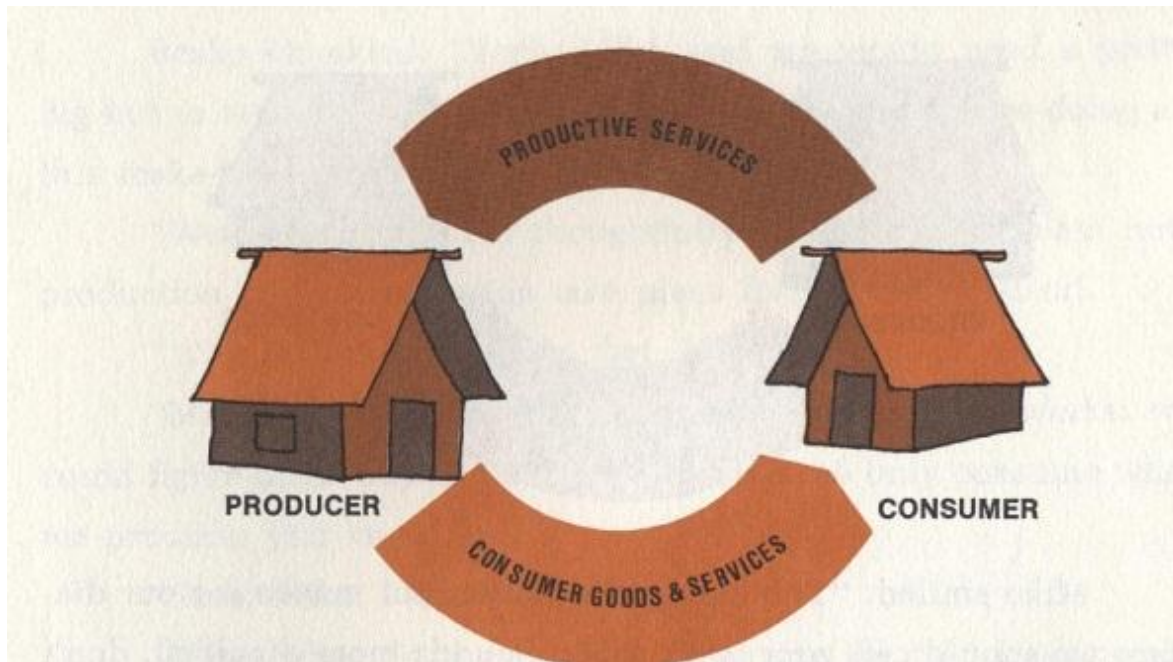


"Good," said Mike. "Now, let's think of what the consumers do for the producers."

"Well, I know what I do for the mill," Bosko answered. "Work! But what about you? You do more than just work. You run the place, too."

"Yes, as the owner and manager I do have to provide other productive services. That's it, Bosko! Let's group together all labor, management, and any other production activities and call them productive services. Now, how does our diagram look?"

"This diagram makes a lot of sense," said Bosko. "The consumers provide productive services like labor and management to the producers, who produce consumer goods and services."



"Right," said Mike. "And in exchange for productive services like labor and management, the people who provide the services receive income payments such as wages and profits. Then they use these income payments for consumer expenditures; that is, they spend their income to buy consumer goods and services. Let's see if we can show this on our diagram."

"I don't think I can understand all these lines going around in circles," Bosko said.

"The lines do flow in a circle," Mike said. "We could a circular flow diagram."

"I don't care what you call it, Mike. I just want to understand it. I'm still not sure about everything in the diagram. Does it mean that everyone is a producer and a consumer?"

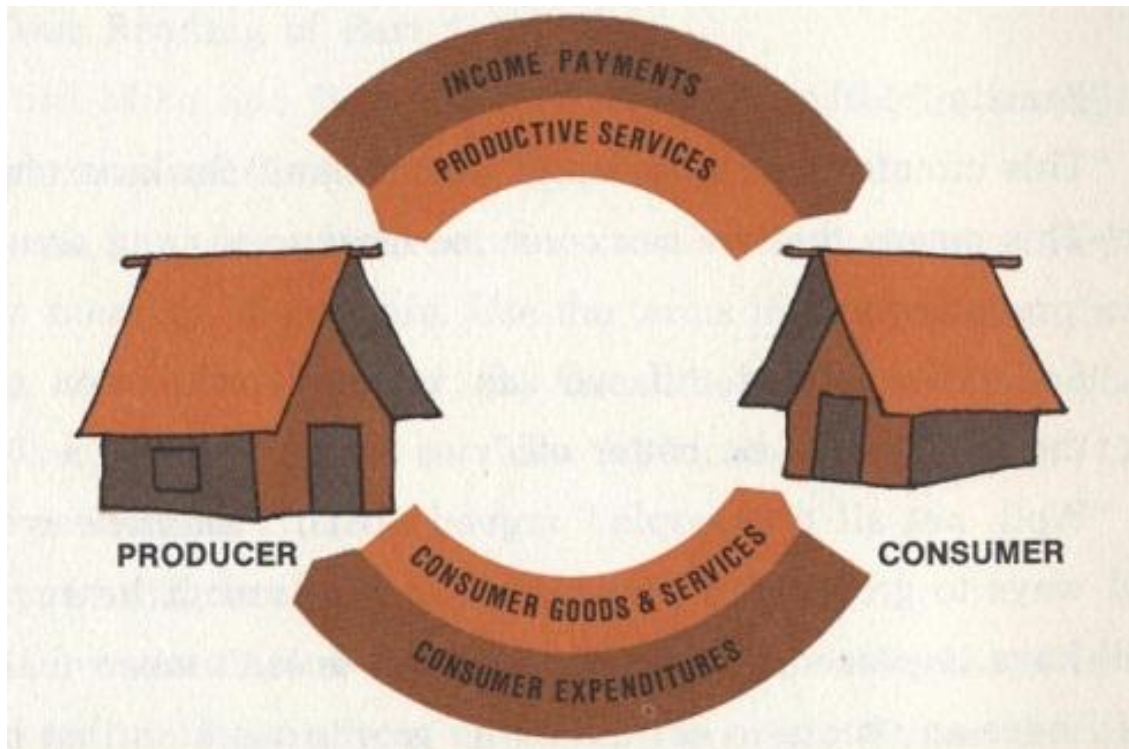
"No. Remember that some people are too young, some too old, and some are too weak or sick to work as producers."

"But everyone is a consumer, right?"

"Right."

"Well, then," Bosko continued, "some consumers provide productive services—such as labor or management—to the business firms which produce consumer goods and services. In return for their productive services, the consumers receive an income - wages or profits. Then they spend their incomes in the form of consumer expenditures to buy the consumer goods and services they need or want."

"Exactly," said Mike.



Bosko studied the diagram. "This means that we can consume more goods and services if we can produce more!"

"So," Mike added, "if we can increase production on the island, everyone will be better *off*."

"Well, not everyone," argued Bosko. "Matthew is trying to find ways to grow more pineapples on his land. If he succeeds, he will increase production. But even if he does produce more pineapples, Lazy Jay won't have any more to eat. Unless he gets to work to earn some rice he won't be able to buy any pineapples. I think he would have to be pretty hungry before he would do that. Also, some people might not have a job no matter how much they would like to work; they wouldn't be any better off."

"Well, maybe Lazy Jay won't be any better off, but if Matthew can grow and sell more pineapples, he will have more rice, and he will want to trade that rice for consumer goods and services. That will encourage other business firms to produce more goods and services. They may even hire more workers and pay more wages. Lazy Jay might not be any better off, but the people on the island as a *whole* will be, and who knows? Maybe even Lazy Jay will benefit in the long run."

Rent, Interest, and Depreciation



Mike's Mill and Trading Post was more successful than most businesses on Paradise Island. Tribe members liked to gather there to swap stories and trade goods. Soon the Trading Post became so busy that Mike ran out of space to store his merchandise.

Jonathan, another member of the tribe, owned a building next to Mike's business. He and his family had lived in it, but had moved into a bigger hut, and for several years the building had not been in use. This gave Mike an idea, and he went to see Jonathan.

"Jonathan," Mike said, "I am interested in using your building as a warehouse, a place where I can store my goods, and have thought of a plan that will be good for both of us. If I will let me use the building, I will pay you five bags of rice rent every month."

Jonathan thought over the proposition and agreed.

The rent that Mike paid to Jonathan was a different type of expense from those he was used to paying. Therefore, Mike had to change his bookkeeping to account for this new expense. Now, before he determined his profit, he subtracted:

- a) the wages he paid to Bosko
- b) the rent he paid to Jonathan
- c) the wages he could earn if he worked for someone else

Mike's business deal with Jonathan worked well. The Mill and Trading Post continued to prosper. Soon Mike was short of space again, and he decided to expand the business by adding a large room.

By this time, rice had become pretty much the standard of value for goods traded. In other words, when a member of the tribe wanted to buy sandals, pineapples, or other goods, he usually stated his terms, or price, in units of rice.

Mike calculated that the total cost for the addition would be 300 bags of rice. He knew that, in time, he would earn more than 300 bags of rice by having this additional space.

He checked his supply of rice and found that he had only 100 bags on hand. But he had many other goods that he had purchased from other members of the tribe to resell. And he knew that his present building was worth much more than 300 bags of rice.

After giving the problem some thought, Mike came up with a great idea about how he could go ahead with his plans, even though he did not have enough rice to cover the costs. He knew that an older member of the tribe, Mr. Moneybags, had a lot of rice stored in a dry cave. Mike went to see Mr. Moneybags about his plans.

"It will cost me about 300 bags of rice to build a large room on the back of the Trading Post," Mike explained. "I just don't have that much rice, and the rice I do have I must keep on hand to use for trading. But I do have assets since I own property. The building I have is worth much more than 300 bags of rice, and it is full of goods. If you will give me a loan of 300 bags of rice for one year, I will pay you back 330 bags."

"Well," said Mr. Moneybags, rubbing his hands together, "that sounds like an interesting way to earn 30 bags of rice. The 30 bags of rice we'll call interest. But how do I know you really will pay me back? How do I know you won't just keep my 300 bags of rice?"

"Now, Mr. Moneybags," protested Mike, "you have known me all my life. You know I wouldn't cheat you!"

"Well, of course I know you wouldn't cheat me on purpose, agreed Mr. Moneybags. "But maybe you just couldn't pay me back. Your business may not be as profitable next year as it is this year. You never know what may happen next year."

"But remember, I have assets," Mike responded. "If I have to, I can trade some of my merchandise for enough rice to pay you back."

"Well, Mike, I just don't know," said Mr. Moneybags, folding his arms. "It sounds like a good idea, but I'll have to think about it awhile. I'll let you know my decision in a day or two."

Two days later, Bosko came running into the Trading Post. "Mike!" he cried, "Mr. Moneybags is here to see you! He's the richest man on the whole island."

"That's why I want to talk business with him," answered Mike as he walked out of the Trading Post to meet his visitor.



"Mike, my boy," began Mr. Moneybags, "I think you will be happy to learn that I have decided to lend you the 300 bags of rice you need."

"Yes, I am very happy to hear that," Mike grinned. "Well, as you said, Mike, I have known you all your life. I trust you. Besides, I have talked to many people about your business these last two days. People like to do business with you."

Mike was pleased. "Well, I have always tried to be fair," he said.

Mr. Moneybags continued, "I can see that you need more space. I think that if you had another room you could much more than the 330 bags of rice you would need to me."

"That's right," agreed Mike. "That's what I told you the other day. And you will earn 30 bags in interest for the loan."

"I know you would have no objection to using your building as security for this loan," said Mr. Moneybags, giving Mike slip of paper. "I have a mortgage here for you to sign."

"What do you mean?" asked Mike. "What is a mortgage? And what is security?"

"A mortgage is simply an agreement," explained Mr. Moneybags. "You agree to pay me 330 bags of rice

in one year, and you agree that if you don't pay me, I can take your building. So you see your building is the security for this loan—given as a guarantee that you will repay the loan.”

“Why, my building is worth much more than 330 bags of rice,” protested Mike.

“I am taking a risk by letting you have 300 bags of rice shrugged Mr. Moneybags. “You must be willing to take a risk too.”

“But that is really a terrible risk for me,” argued Mike. “I will have to have some time to think about it.”

Mike thought about his problem for quite some time. He felt certain that he could earn at least 330 bags of rice in a year if he had the additional space. However, if he were not able to, he would lose his Mill and Trading Post. At first he decided not to go ahead with the plan. But then he got another idea.

“I have decided that it would be easier for me if I could pay you back in monthly installments rather than pay all of the 330 bags of rice at the end of the year,” Mike explained to Moneybags.

“Hmmm,” said Mr. Moneybags, “that might be worked out, my boy. That way I will not have to wait until the end of the year for you to repay the loan, and I will still get 30 bags of rice for interest.”

“Wait just a minute, Mr. Moneybags,” protested Mike. “If I pay you back part of your rice each month, I will not have the use of the whole 300 bags of rice for the entire year. It wouldn't be fair for me to have to pay interest on 300 bags for the entire year.”

“It sounds fair to me,” Mr. Moneybags muttered.

“No,” said Mike firmly, “I will pay you 25 bags of rice each month ($300/12$) to repay the loan. Interest must be figured separately. During the first month, I will have the use of the entire 300 bags. During the last month I will have the use of only 25 bags, since I will have paid back 275 bags in monthly installments. Interest will be figured each month on the amount of rice I still owe you.”

“All right, Mike,” agreed Mr. Moneybags. “I won't argue. You are a very good businessman.”

The plan worked well, and at the end of a year Mike had returned the 300 bags of rice, plus interest, to Mr. Moneybags.

During the period that Mike was making loan and interest payments to Mr. Moneybags, he had to change his bookkeeping. Before he could determine his profits, Mike now had to subtract:

- a) the wages he paid to Bosko
- b) the rent he paid to Jonathan
- c) the loan payment and interest he paid to Mr. Moneybags
- d) the wages he could earn if he worked for someone else

One day Mike got to thinking about the future. “Someday,” he thought, “I am going to have to replace my buildings, machinery, and equipment. I can see that things will wear out in time. I had better put some rice aside so that I can make these replacements when the time comes.” Then it occurred to him that he had been stating his profits too high. “After all,” he thought, “I cannot count as a profit the rice I have to set to replace property and equipment as it depreciates.”

Mike decided to make a list, which he called an inventory, of all that he owned, his assets. He divided the list into:

- a) everything that he owned that had to do with the Mill and Trading Post—his business inventory, and
- b) everything that he owned that had to do with goods used in his home—his household inventory.

He was only concerned with depreciation of his business assets, so he took his business inventory and divided that into:

- a) all items that would depreciate and would have to be replaced in the future

b) merchandise that he had for sale

He added up the value of his building and the total of the items that would have to be replaced and calculated value to be 1000 bags of rice. He decided that, on the average, replacements of things which would wear out would have to be made every ten years. Therefore, he would have to set aside 100 bags of rice each year if he were to have enough rice to make these replacements. He decided to call the cost of replacing buildings and machinery depreciation expense.

Mike once again changed his bookkeeping. Now, before determined his profit, he subtracted:

- a) the wages he paid to Bosko
- b) the rent he paid to Jonathan
- c) depreciation expense
- d) the wages he could earn if he worked for someone else

It was no longer necessary for Mike to subtract loan and interest payments since he had paid Mr. Moneybags back in full.

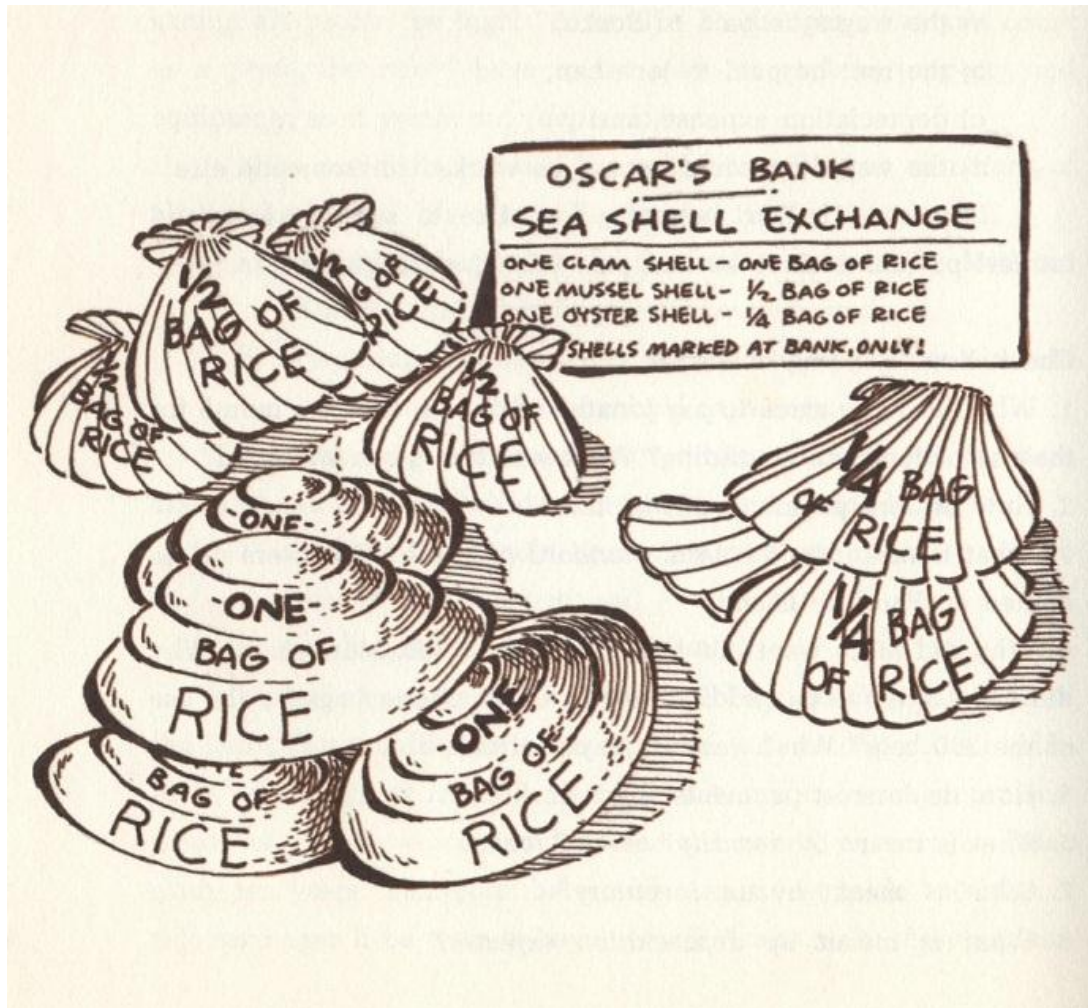
Oscar's Bank

Many tribe members stopped by Mike's Mill and Trading Post to have flour ground. Busy families often left goods with Mike to resell to other members of the tribe. Sometimes Mike would buy these goods from the persons leaving them and would try to sell them at a profit. At other times, he would not buy the goods, but would sell them for the highest price he could get then charge the person who left the goods a small amount for his services. He called this return for selling goods for other people a commission.

Farmer Matthew came to Mike one day and wanted to leave some pineapples for Mike to trade, but he wanted something to prove he had left them, a receipt. Mike thought for a moment. Then he picked up a sea shell and wrote on it, "I owe you one bag of rice." He then signed it. Matthew knew he could either keep the sea shell or exchange it for other goods, since everyone trusted Mike and knew he would exchange rice for the sea shell.

Other members of the tribe found that Mike was willing to give similar sea shells to them for goods they left at his Mill and Trading Post. They would leave their goods and take their receipts.

The special sea shells were much easier to carry than goods such as rice. Therefore, the natives used the sea shells when they bought or sold goods and services; these special sea shells became the medium of exchange for the island. People accepted shells in payment for goods and services because they had a standard of value established by Mike. The standard of value was the amount of goods—such as rice—that Mike agreed to give for each special sea shell returned to him.



Late one afternoon Mike called to Oscar as he walked by the Trading Post, "Oscar, can you stop a minute? Bosko and I have a problem. You know I have been giving out sea shells with notes on them saying that they were worth so much rice or so many pineapples or bananas or other goods."

Oscar nodded. "Yes, Mike. I think it is a good idea. Sea shells are much easier to carry than bags of rice or other things."

"I'll say they are," broke in Bosko. "People are carrying them in here by the bagful."

Mike explained, "I have been accepting the special sea shells in exchange for merchandise bought at the Mill and Trading Post. But some folks are picking up sea shells on the beach and bringing them here. They say their sea shells are just as good as mine, and some people get mad when I won't give them merchandise for their shells. You're good at figures and trading. I thought maybe you could tell me what to do."

"We can't sell things for just any old shell," said Bosko. "There are millions of them on the beach. If people insisted using them, they would clean us out of goods in one day!" That really is a problem," said Oscar. "The idea of using shells is a good one, but each shell must have security, a guarantee or backing behind it. Sea shells in themselves are not worth anything."

"They are if Mike writes a note on them," objected Bosko. Oscar nodded. "So it is Mike's note that is worth something, not the shell."

"Then the thing to do," said Mike, "is to tell them that I will write a note on their shells if they will store rice, bananas, sandals, or something else with me. But I really don't want to do that kind of business."

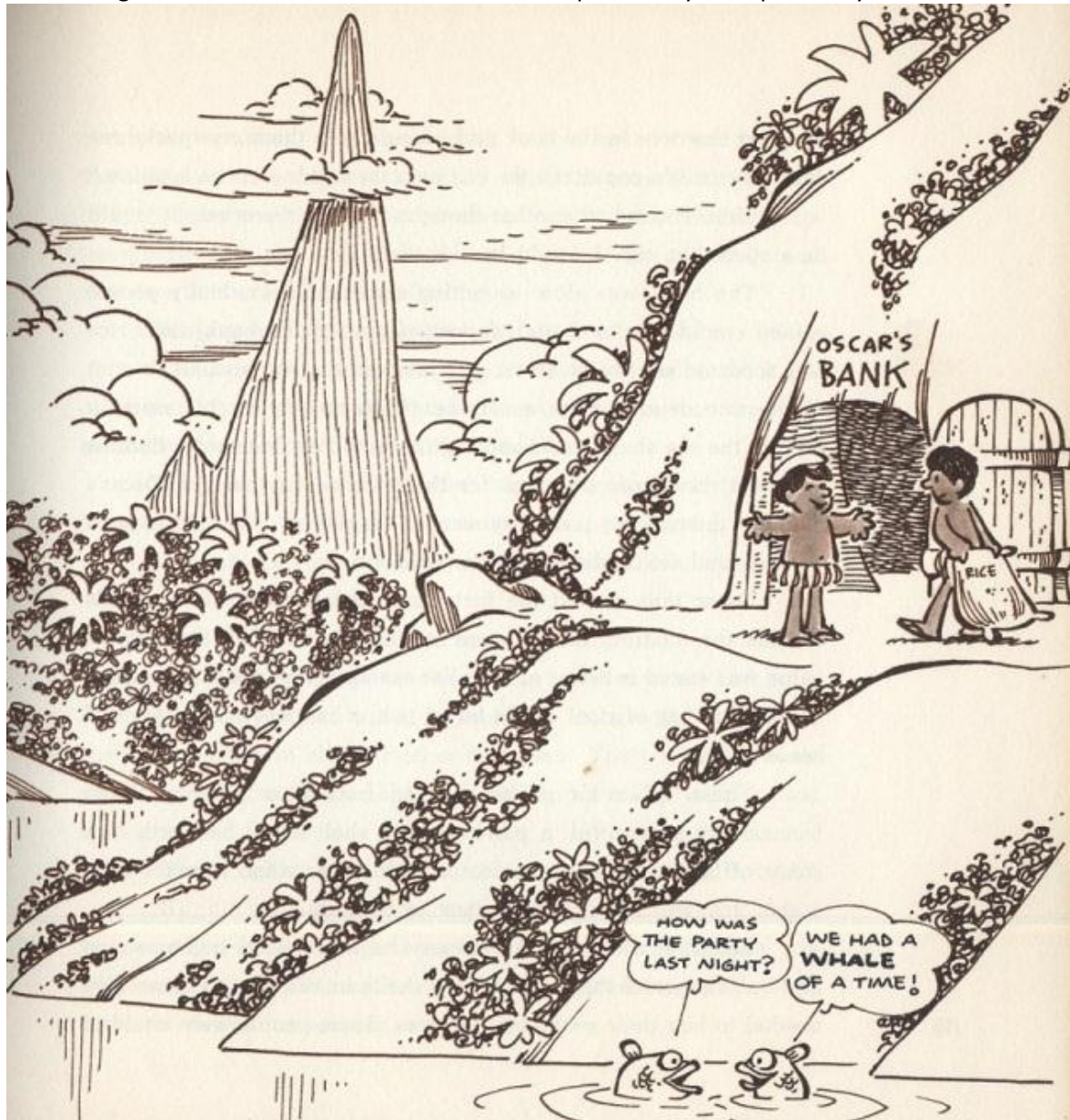
"Even if you did, the system wouldn't work unless you had some special safe place where people could

take their goods and turn them in for shells," answered Oscar. "Then they would have to be able to turn in their shells any time they wanted to and get their goods back."

"Why?" asked Bosko.

"Because," answered Oscar, "the sea shells have no value in themselves. People would accept them only because they knew they could turn in the sea shells for the goods that backed shells—the security behind them. The note tells what is back of the shell and, therefore, gives the shell value. If a person couldn't turn in the shell for the amount of goods stated in the note, then Mike's shells wouldn't have any more value than the shells on the beach."

"There is one other thing," added Mike. "You couldn't have people taking bananas to this special place and leaving them for months and months. Bananas spoil in only a couple of days."



"That's right," agreed Oscar. "Your security would have to be something that would be just as good when you got it back as it was when you left it, no matter how long you left it. I guess it would have to

be rice.”

“You know, Oscar,” said Mike, “if you could work out this system it would be a wonderful thing for the island. This could be another business in itself. It sounds like a perfect one for you.”

“Mike, I think you are right!” exclaimed Oscar. “I could use that big dry cave above the river bank. People could bring their rice to me at the cave in the bank and I would give them my special sea shells for it. We could call the business the bank, after its location.”

Then Oscar had another thought. “I would be a specialist, Mike. I would be a banker”

The bank was slow in getting started, but gradually people gained confidence in it and deposited their rice and accepted sea shells. Oscar was allowed to keep a small amount of the rice deposited, as a service charge to pay for his work in issuing the sea shells and handling the rice. People could withdraw rice from the bank for their sea shells that had Oscar’s mark on at any time they wanted the rice, or they could spend their special sea shells for goods and services.

Oscar thus started the first bank, and his special sea shells became the medium of exchange for the island. Their standard of value was stated in terms of rice. For example, one sea shell marked “one-fourth bag of rice” might buy a pair of sandals or two stems of bananas.

These values changed from time to time. When bananas were plentiful, a particular sea shell might be worth four stems of bananas, but in the season of the year when bananas were scarce, it might buy only one stem of bananas.

Families who were ambitious and were good traders saved a number of these special sea shells in addition to those needed to buy their goods and services. Some people were afraid of losing the sea shells they had saved, so they asked to keep them safe in his bank, which he did. With the permission of some of his customers, he lent sea shells to people needed them temporarily. He charged interest for the loan of the sea shells and this gave him some additional income.

One day Mr. Moneybags stopped at Oscar’s bank. “Good morning, Mr. Moneybags,” cried Oscar as he shook older man’s hand. “I am delighted to see you. I hope that have decided to become a customer of my bank.”

“Oh, no, Oscar,” replied Mr. Moneybags with a laugh. “You don’t really think I’m that foolish, do you?”

“Foolish! Of course I don’t think you are foolish,” exclaimed Oscar. “What do you mean?”

“Well, if I understand this bank idea of yours, I would have to be foolish. You want me to take my rice out of my cave and bring it to you. Then you will put it in your cave along with the rice you have collected from all your other customers. You will give me sea shells for my rice, and I can buy goods and services with the sea shells.”

“That’s right,” agreed Oscar. “I see nothing foolish in that.”

“No, not in that,” Mr. Moneybags continued. “What I object to is paying a service charge for sea shells left at the bank. Sure, you will keep them safe for me, but I call it monkey business to pay you a service charge for keeping my sea shells.”

“Oh, now, Mr. Moneybags, I wouldn’t call it monkey business,” said Oscar. “I am performing a service.”

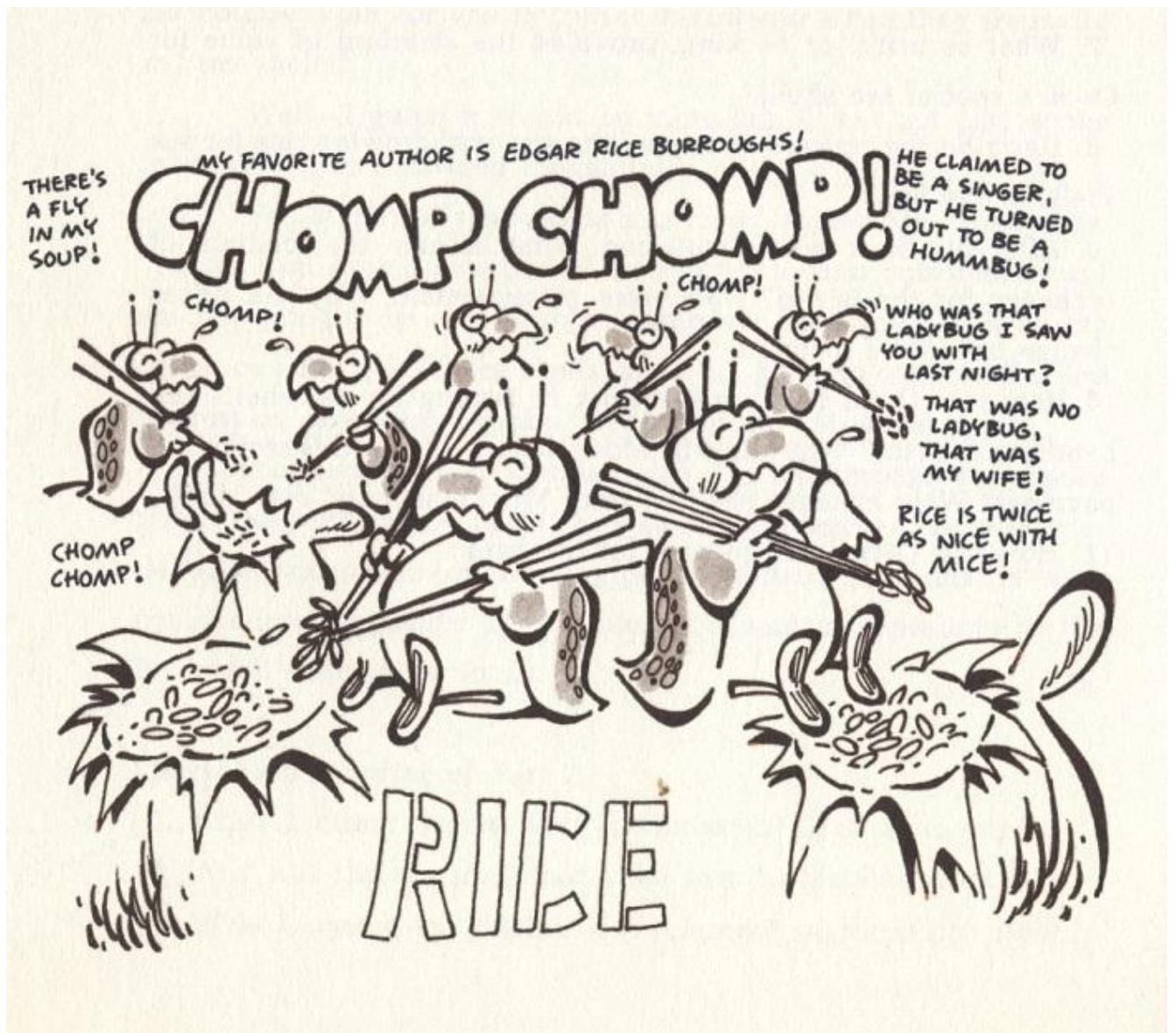
“You are performing a service for yourself,” continued Mr. Moneybags. “You take *my* sea shells that I have paid you to care for, you lend them to other people, and *you* collect interest. Now I ask you, is it fair for *you* to collect the interest when they are really *my* sea shells?”

“Well—I guess it would be more fair if you got part of the interest,” Oscar answered thoughtfully.

“Yes, it certainly would be more fair,” agreed Mr. Moneybags. “I think you should give part of the interest to your customers, but I am not going to be one of your customers. I am going to keep my own rice and my own sea shells, and I am going to collect *all* of the interest on any loans I make.” With that, Mr. Moneybags left.

Afterwards, Oscar decided that Mr. Moneybags was really right. The bank should pay a small rate of interest to customers who deposited sea shells for any long period of time. The bank, in turn, could more than make up the interest it paid to depositors by the interest it charged for loans.

Trouble at the Bank



Mike was doing some bookkeeping in his ledger one morning when Bosko came hurrying into the Trading Post. "Mike!" he cried, "there's an awful lot of excitement at the bank!"

'What's going on?" asked Mike.

Oscar says some of the rice in his bank cave is spoiled. Some kind of bugs got into it," said Bosko.

'Yes," said Mike, "Oscar told me about it—a terrible thing."

"Well I guess he told some other people, too, because today just about everybody on the island is over at the bank trying to turn in the special sea shells for rice. You should see it! Oscar is giving them their rice as fast as he can, but more people keep coming. They think he will run out of rice and have to close the bank. People won't take spoiled rice."

Mike closed his ledger. "I'm going over to the bank to see if I can do anything to help Oscar. You take care of the Trading Post," he said.

At the bank people were crowding all around, yelling and waving their special sea shells in the air. As Mike slipped through the crowd, he saw that the door of the bank was closed. Poor Oscar was standing in front of the door shouting, "The bank is closed!" But there was so much noise that very few people could hear him. There were cries of "Oscar took our rice," and "We can't eat sea shells!" Some were even saying, "I'll tear him apart."



Mike felt someone pull at his arm and he turned as Mr. Moneybags shouted in his ear, "These people will do something terrible to Oscar! We have to help him." Mike nodded and together they pushed their way to Oscar's side. Mr. Moneybags held up his hands for quiet. Gradually the people quieted down. "Hurting Oscar won't solve this problem," shouted Mike. Mr. Moneybags added, "Let's all go to Chief Solomon. This is a problem for those of us on the tribe council to try to solve." "The idea of the bank is a good one," Oscar reassured the people when they were a little more calm.

"We must find out what went wrong with the idea. We will do everything we can to make sure everyone gets as much rice as we owe him."

Oscar, Mike, and Mr. Moneybags led the angry crowd to the home of Chief Solomon. As the three of them explained the problem Chief Solomon stroked his beard and shook his head. Finally Mike and Oscar helped their chief scramble up on a large rock and he raised his hands for silence.

"Oscar and his friends have told me what has happened," he said, "This is a most serious problem."

Someone shouted, "Make him give us back our rice!"

Chief Solomon raised his hands again. "Now, now—Oscar is honest man. It is not his fault that he can't give you your rice. Oscar has asked me to call together the tribe council. If you will give us a few days, we will try to solve this problem." The people turned away and began to return to their homes, but there was much angry muttering as they went.

Chief Solomon called the council together. For days they talked and argued. They all agreed that the bank was a good idea, but that something was wrong with rice as a standard of value for the special sea shells which served as the medium of exchange.

Finally Chief Solomon asked Oscar and Mike to come to the meeting. When they arrived, Mr.

Moneybags motioned for them to sit beside him.

Slim Jim was saying, "The supply of rice can be increased too easily. People have been growing more rice so that they can exchange it at the bank for Oscar's special sea shells. That is probably why the rice spoiled. Too much rice has been piling up in the bank and, as a result, more and more special sea shells have been issued."

"What's so bad about more special sea shells issuing?" asked Chief Solomon. "They're mighty handy for doing business."

"With more of these shells in use," Slim Jim continued, "people are willing to exchange more of them for goods and services. Prices are higher; goods and services cost more in terms of the special sea shells. But people who have been working for wages, whose wages have not been raised, cannot buy as many goods and services as before. In *fact*, many of them have quit their jobs and have gone back to gathering and raising their own food."

"Yes," Slim Jim added, "the value of the special sea shells has decreased and prices have increased. This means that the amount of goods and services people can get for the money they earn—their *real wages*—*have* decreased. All of these conditions mean one thing—we have inflation on the island, because wages received in sea shells will not buy as much as they once did."

Then Big Joe, the fisherman, said, "I think I have a solution to our problem. For a long time we have been finding small amounts of gold on the island. It is highly prized for making jewelry. It is hard to get and is not plentiful. It will not spoil and it will always have value. The value will not change because far as we know the supply cannot be increased very much.

I suggest that we use gold instead of rice as the standard of value for the sea shells issued by the bank, and that we explain reasons to the people. Have them turn in their gold at the bank and we shall issue sea shells again with a definite value terms of gold."

The members of the council agreed that this was a very good idea.

Slim Jim questioned using gold as a standard of value. "Tribe members would just dig up gold from the hillside and destroy land. People are interested in what the shells will buy, in what backs them," he continued.

"That may be true," Big Joe added, "but the gold backing a standard of value gives people confidence in the shells."

The members of the tribe council argued for a long time. Finally, they decided that some gold would be used to back the shells. They reasoned that not everyone would want to withdraw shells at the same time. Thus Oscar would need some gold backing, but not an amount equal to the total value of the shells.

Chief Solomon appointed Slim Jim, Big Joe, and Mr. Moneybags as members of a banking committee to review the problems that would come up under the new plan.

Slim Jim spoke up again, "If we are going to reopen the bank, I don't think we shall have any success unless we have some rules. I think Chief Solomon and the council should regulate the supply of sea shells issued by the bank. It is not fair to allow Oscar to be responsible for keeping the gold and issuing sea shells without some rules."

Chief Solomon said, "That is true. I will instruct the banking committee to make rules for the bank. Is that all right, Oscar?"

Oscar scrambled to his feet. "Yes, Chief Solomon, that is fine," he answered. "And there is one other thing that I have thinking about. I wonder if we could use something else in place of sea shells as a medium of exchange. Some sea shells are hard to write on, the marks sometimes come off them, and when I get a lot of them at the bank they are hard to keep neat. I think using gold as the standard of value for the shells is a very good idea. And as long as we are changing the standard of value for our system, I think this would be a good time to change the medium of exchange as well."

"But what could we use?" asked the chief.

"Well, the paper mill has been producing some fine paper," answered Oscar. "I think paper would be the best thing." He held up his fingers to form a rectangle. "We could use pieces of paper about this big. There would be no problem writing anything on them that we want, and we could keep them in neat stacks. Paper could be the main medium of exchange and could be used for larger amounts. For small transactions, we could stamp pieces of metal to make coins."

Chief Solomon looked around at the members of the council and replied, "I have only one word of caution. We must be certain that no one other than the bank issues paper notes of this type. The coins should cause us no problem. I appoint Mr. Moneybags, Slim Jim, and Big Joe to look into this when they make the rules for the bank. Does anyone object to this?"

"It sounds all right to me," Slim Jim said. Other members of the council nodded in agreement.

"All right," said Chief Solomon. "We are agreed. I hope these ideas will work, Oscar. Your bank performs a real service For the people of the island."

After the meeting was over, Mike, Oscar, and Mr. Moneybags walked back to the Trading Post together.

"I don't know how to thank both of you enough," said Oscar. "I don't know what those people would have done to me when had to close the bank if you hadn't helped me. I still have to pay the people for their rice that spoiled, but now I will be able to reopen the bank and it will be much better than it was before. Fortunately, not too much of the rice was spoiled, and think I have enough of my own rice to make up all the people's losses."

"I don't think your troubles are over yet, Oscar," warned Mr. Moneybags. "Changing from rice to gold is going to confuse my people. Before, you gave them sea shells for their rice, now you will give them scraps of paper. Besides, people we lost confidence in your bank. They will not be eager to be your customers."

"I think Mr. Moneybags is right, Oscar," Mike said. "A lot of people will keep their gold at home, and maybe even keep on trading rice for the things they need. I'll help you all I can by putting my gold in your bank and using this paper stuff and coins in the Trading Post. What are you going to call this paper, anyway?"

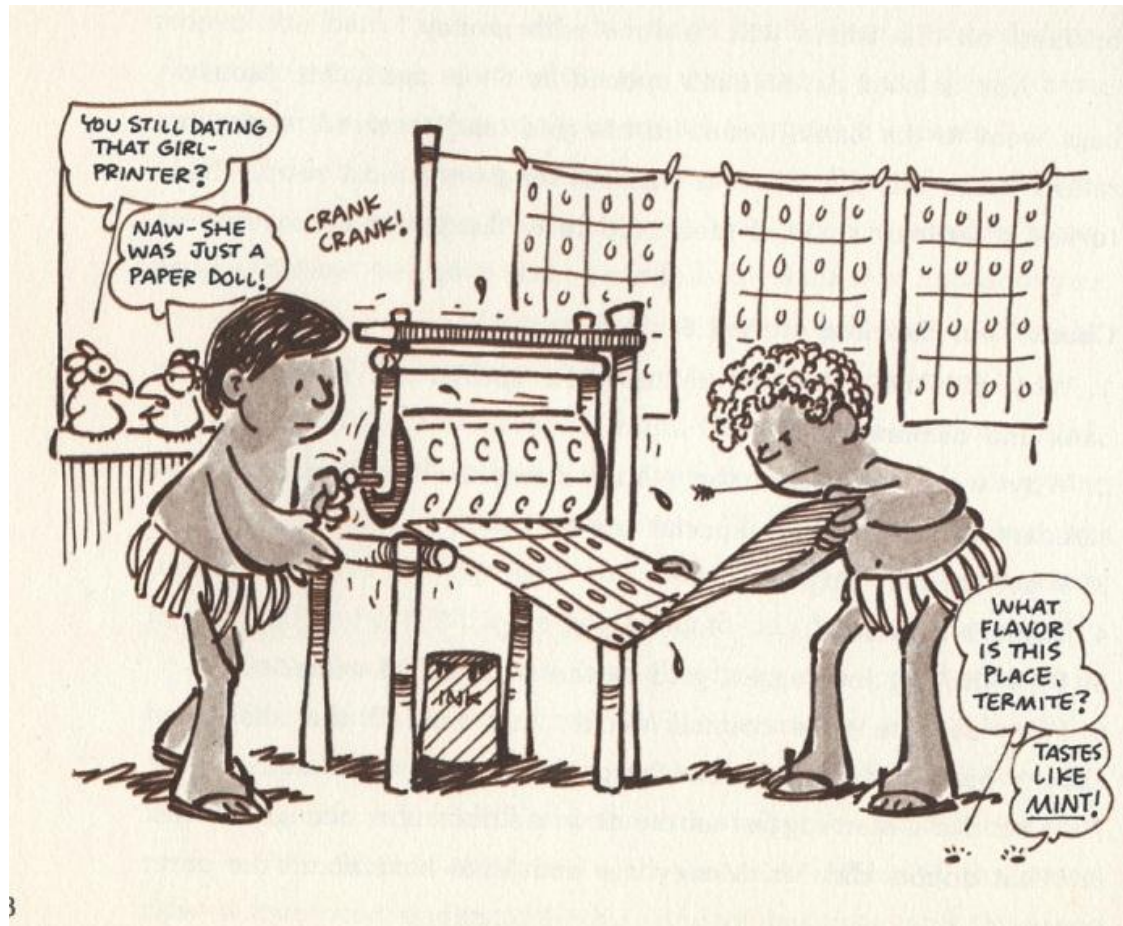
Oscar thought a minute, and slowly a smile spread across his

"Of course!" he exclaimed. "What better way would there be to let people know that this new system will be a success? We will name both the paper stuff and the coins after the most successful man on the island—the man with the most gold and rice—a man who understands this kind of business, the man who helped save my life. We will call it money!" Mr. Moneybags and Mike both stopped in their tracks. Why—that is most kind and flattering of you," gasped Mr. Moneybags. "Money—money, it does have a lovely sound to it." "That is a great idea," grinned Mike. "From now on all business on this island will be

done with money.”

And as soon as the bank opened its doors again, Mr. Moneybags went to the bank, turned in his gold, and received money in return. Mike did the same. It was not long until most people had turned in at least some of their gold in exchange for money.

Understanding Money

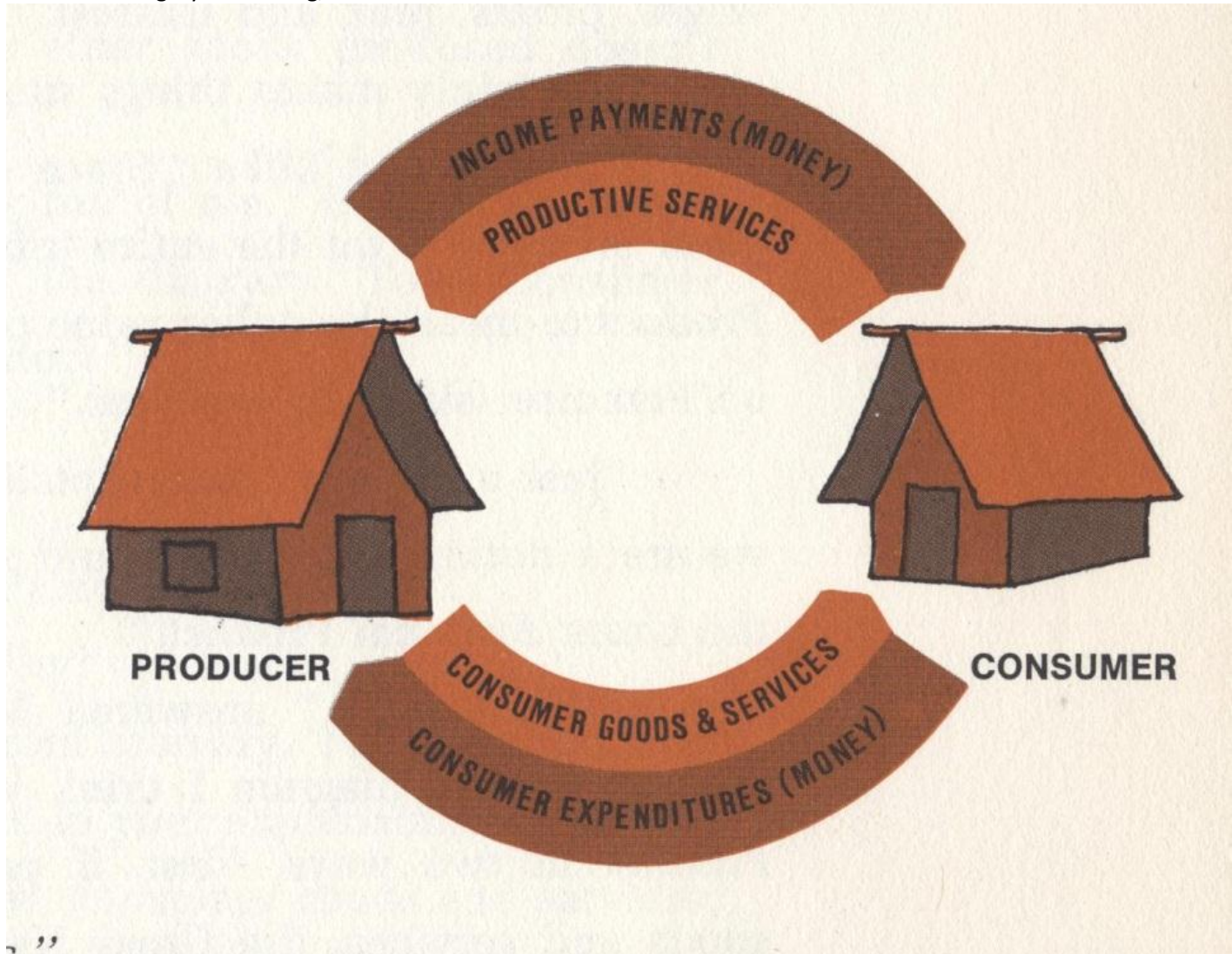


Paper money became the principal medium of exchange on Paradise Island. A special printing office controlled by the tribe council issued paper money in dollar units—ones, five, twenties, fifties, hundreds, and even larger amounts.

Most people on Paradise Island did not carry a lot of money around, and they were often short of money when they had unexpected expenses. When this happened to Mike one day, he simply wrote a note to Oscar stating, "I owe Jonathan \$100 Please take this amount (\$100) from my account and transfer it to Jonathan's account." Oscar was willing to make this transfer when he got Mike's note. Oscar decided that it would be easy to transfer funds for people this way, and it would be a real service for his customers. Everyone's signature was different, so he could always identify the notes people wrote. When the tribesmen learned that Oscar was willing to transfer money from one account to another, it was so convenient that many of them had him do it.

Oscar found, however, that the notes were written different kinds and sizes of paper, and it was difficult for him to handle the various notes he received. So he printed some standard forms that could be used by his customers. He called these forms *checks*. The checks became very popular, and soon more checks were used for business transactions than paper money. People soon realized that checks were a form of money, and they accepted them as a medium of exchange for goods and services. Thus checks increased the supply and use of money.

Mike wondered if he could explain the circular flow diagram with money in the picture. Once again Bosko and Mike drew the circular flow diagram that they had drawn before.
 “That looks mighty interesting,” Oscar mused. “What is it?”



Bosko explained, “This is a circular flow diagram that shows how goods and services and income circulate on Paradise Island. For example, it shows that income goes around in a circle as it moves from the producers to the consumers and back to the producers. Producers pay income to consumers who in turn spend their income buying goods and services from producers.”

“Wait, slow up a bit, Bosko,” Oscar cautioned. “Why do producers pay income to consumers?”

“Well, the consumers receive income because they provide productive services for the producers—right?” Bosko went on.

“What do you mean—productive services?” Oscar asked.

“I mean all the services needed to produce goods. Labor is one productive service. I work for Mike, and I receive wages.

But management, like Mike’s job running the Trading also a productive service. Mike takes risks running a business, and he earns profits. Land, including other natural resources, is another productive service. Remember that Mike is using Jonathan’s land with a building and is paying him rent. Another productive service is the money lent to businesses to help them buy capital goods—you know, tools or buildings.

Mr. Moneybags lent Mike the money to enlarge his business, and Mike paid him interest. So everyone who supplies these productive services receives money income in the form of wages, profits, rent, and interest."

Oscar nodded, and Bosko continued. "When these consumers—many of whom are also producers—receive their income, they share it with other members of their households and buy the things produced on Paradise Island. We call these consumer expenditures."

Oscar had a question. "If all the income is spent for consumer goods and services, wouldn't the total dollar value of the payments be exactly equal to the dollar value of the consumer expenditures?"

"Right," Mike answered. "Producers pay income to consumers who in turn spend their income to buy goods and services from the producers. The money goes around in a circle."

"Actually," Mike added, "there was a circular flow of income and expenditures on the island before we had money. Money was created merely as a convenience—a social invention—so people wouldn't have to receive rice, bananas, sandals, or other goods for wages, profits, rent, and interest."

"Certainly makes things simpler," Bosko agreed.

"Look," said Mike. "Since our diagram explains the total or gross production for the entire tribe, let's use the term Gross Tribal Product to mean the dollar value of all goods and services produced on Paradise Island in one year."

"Just a minute," interrupted Oscar. "We aren't just a tribe— we are a nation. I think it would sound much better if we called it the Gross National Product."

"You're right," answered Mike. "Gross National Product it will be. In our diagram I think we can show the Gross National Product in two ways. First, if people spent all their income on goods and services, the Gross National Product would be exactly equal to the dollar value of what is consumed in one year—consumer expenditures, that is. And as Oscar has already said, consumer expenditures must then be equal to income payments, so the Gross National Product would equal all the income earned in one year in the production of goods and services. So Gross National Product would be equal to the two flows shown on our diagram—consumer expenditures and income payments."

"But Mike," Bosko objected, "sometimes people grow more bananas than can be eaten. The extra bananas spoil and we have to throw them away. They were produced, but weren't Consumed."

"Rotten bananas don't have any dollar value, Bosko. Zero added to the dollar value of the other goods produced doesn't change the answer much, does it?"

"Mike, I think you're making fun of me," Bosko complained as he wrote across the bottom of the diagram "Total Consumer Expenditures = Gross National Product."

The Effects of Business Investments



Mike looked at the equation Bosko had drawn. “Consumer Expenditures = Gross National Product,” he said with a smile.

“You are starting to think the way Oscar does, Bosko.”

Oscar studied the equation for a while before he spoke. “There is one thing wrong with your equation, Bosko,” he objected. “The Gross National Product might not always equal to consumer expenditures. Some people don’t spend their income on food and clothes and other consumer goods. I’m thinking about a businessman like Mike. Suppose that Mike spends some money to expand the size of his business building, or that another businessman buys better tools. These are not consumer expenditures; they are business expenditures.

“The businessman puts money into these improvements because he expects that sometime his building or his new tools will give him a higher income or profit—and the money he uses to buy them is called an investment. If a businessman invests money in his business, he will not be able to use this money to buy goods and services for personal consumption.”

“That’s a good point, Oscar,” Mike nodded. “And since these investments have a dollar value and were produced during the year, they are also a part of the Gross National Product.

“Producers, in a sense,” Mike continued, “run a side business. They spend part of the money they receive from consumer expenditures to produce capital goods such as better tools and more efficient

machinery. The people who provide the productive services to make business goods receive income payments the same as if they were producing consumer goods."

Bosko thought about this for a while. "If the total amount of income payments stays the same, the total amount of consumer expenditures will stay the same, right?"

"Well, there are some minor exceptions," answered Oscar, "but basically that is true."

"Well, then," Bosko continued, "I see a problem. Some people are now producing machinery and stuff like that for businesses rather than goods consumers want to buy. So there will be fewer consumer goods and still the same amount of money available to buy them. If consumers continue to spend the same amount, prices are bound to go up, aren't they? And my wages won't buy as much. I don't like it. Do we really need business investments?"

"Of course we do, Bosko," Oscar answered. "businesses must invest in better equipment and tools if we are to increase production. What would life be like on Paradise Island if Bernard hadn't produced the plow? Could Matthew grow as many pineapples? How else can total production grow on the island if businesses don't invest in new and better equipment tools?"

"Well, more people could work," Bosko answered. "Lazy Jay for one!"

"If there are people who are willing and able to work who aren't working now, why couldn't they be employed produce the capital goods?" Mike asked. "Then the amount consumer goods produced would remain the same."

"Yes, but these people would also receive an income and we would have more money chasing the same amount of goods again," Bosko replied. "Prices would go up, I couldn't buy as much with my wages, and as a wage earner I don't like the idea at all. That's inflation."

"I think I might have a solution," Oscar said. "Not all income is spent for consumer goods and services. Some money is saved and put into my bank. As a banker, I could lend this money to businessmen who want to invest in better tools and equipment. These investments, in turn, would increase production. If people saved enough to match the investments, prices would remain stable, production would increase, and we would all be better off."

"Well, I guess that makes sense," Bosko replied. "but I want to think about it."

"Do you think you can change the equation so that it is correct, Bosko?" Mike asked. Bosko crossed out the old equation and started to write a new one: "Consumer Expenditures + Business Investment = Gross National Product." He found that he was running off the paper.

"I don't have room for all that," objected Bosko. "Can I just put down 'I' for Investment, and $C + I = \text{GNP?}$ "

Oscar chuckled. "You'd better keep an eye on Bosko, Mike. He will soon be talking in equations around the Trading Post just to confuse people."

Establishing Representative Government

Chief Solomon was the official ruler of the island nation. He had the advice of the tribe council, which consisted mainly older men, but most arguments and disputes were brought Solomon to settle. He gave his decisions as he saw fit, but decisions were not always the same, and no one knew what expect when a dispute arose. For example, Solomon decided one case that the person who tamed a wild ox was the owner, but in another case he allowed a man who found a tame ox keep it. There were many arguments and much hard feeling.

One day Solomon called the tribe council together and said, "I'm tired of making all these decisions and settling all these arguments. There must be an easier way. What do you say?"

The council discussed the problem for hours. Finally it decided that it would be a good idea to establish some general rules, or laws. These laws would not only guide the chief in making decisions, but would also give the people a better idea how to get along together and what to expect in the way of decision if an argument arose.



Gradually, laws were written, based upon past arguments and disputes. These laws were made known to everyone. Periodically the council would meet and suggest new laws. People became more content; there were fewer disputes because people knew what they could do, and could not do, and when the disputes were brought before the chief he had a pretty good idea of how to settle them.

"People want better roads; they are no longer satisfied with paths," Chief Solomon stated at a meeting of the tribe council. "I suggest that it is the responsibility of the whole tribe to build roads for everybody to use."

Everyone agreed to Chief Solomon's idea, but then the question arose as to how the roads would be paid for. It was decided that each family would give one percent of income each year to the tribe council

to be used to pay workers hired to build the roads. Any family that did not want to pay this money had the privilege of furnishing one member of the family to work on the roads five days each year. Thus, government services, like road building and taxes that people pay to support their government, were introduced on Paradise Island.

Work on the new roads was well under way when a new problem arose—Lazy Jay refused to pay the taxes or to work on the roads. Jay was an independent fellow, and he insisted that he could do as he pleased since this was a free nation.

Several days after Jay had refused to pay his taxes on the roads, Stubby Jumbo decided that he needn't contribute either. If Jay did not pay his share, why should he?

Chief Solomon called the tribe council together to what to do about the problem. This was something new for which there were no laws. After much discussion, a solution was reached. It was agreed that since the tribe members were all living and working together and the roads were for the good of everyone, there should be a law which said that each could be forced to contribute his share. Jay and Stubby put to work on the road under the watchful eye of a guard, who was one of the few policemen on the island. When each man had completed his five days of work, he was allowed to go free.



Jay thought that he had been treated unjustly. One day meeting of the tribe council he pointed out that businesses were using the roads to move their goods from one place to another to sell them. He reasoned that since they were making profits from the use of the roads and also caused the roads to wear out or depreciate, the businesses should be taxed. The tribe discussed the idea and agreed that any person or firm which used the roads for business purposes should pay a tax. This was the beginning of business taxes on the island.

The tribe council hired several tribesmen to collect taxes and to organize the road construction industry. The new government services increased public employment, since tax collectors and road builders were government employees.

At the end of the first year of government taxing and spending for roads and police service, there was some money the treasury. The tribe council agreed to make a small payment to a poor family that was not able to earn enough money to buy adequate food and clothes. Another small payment was made to a farmer who had lost most of his crops. These were the first welfare payments on Paradise Island. The better roads and other government services started the natives thinking about other ways in which life could be improved on Paradise Island. They thought about one problem, the water supply. Many members of the tribe had to go a long distance to springs for their water, and this took a lot of time. Finally Jonathan found a solution. He fitted bamboo poles together and made a pipeline to bring water down from a mountain spring to his hut. One of his neighbors got another idea. He dug a ditch and ran a lot of water down the mountainside to use in watering his garden. Everybody became excited over the new ideas, but some people complained because much water was being wasted.

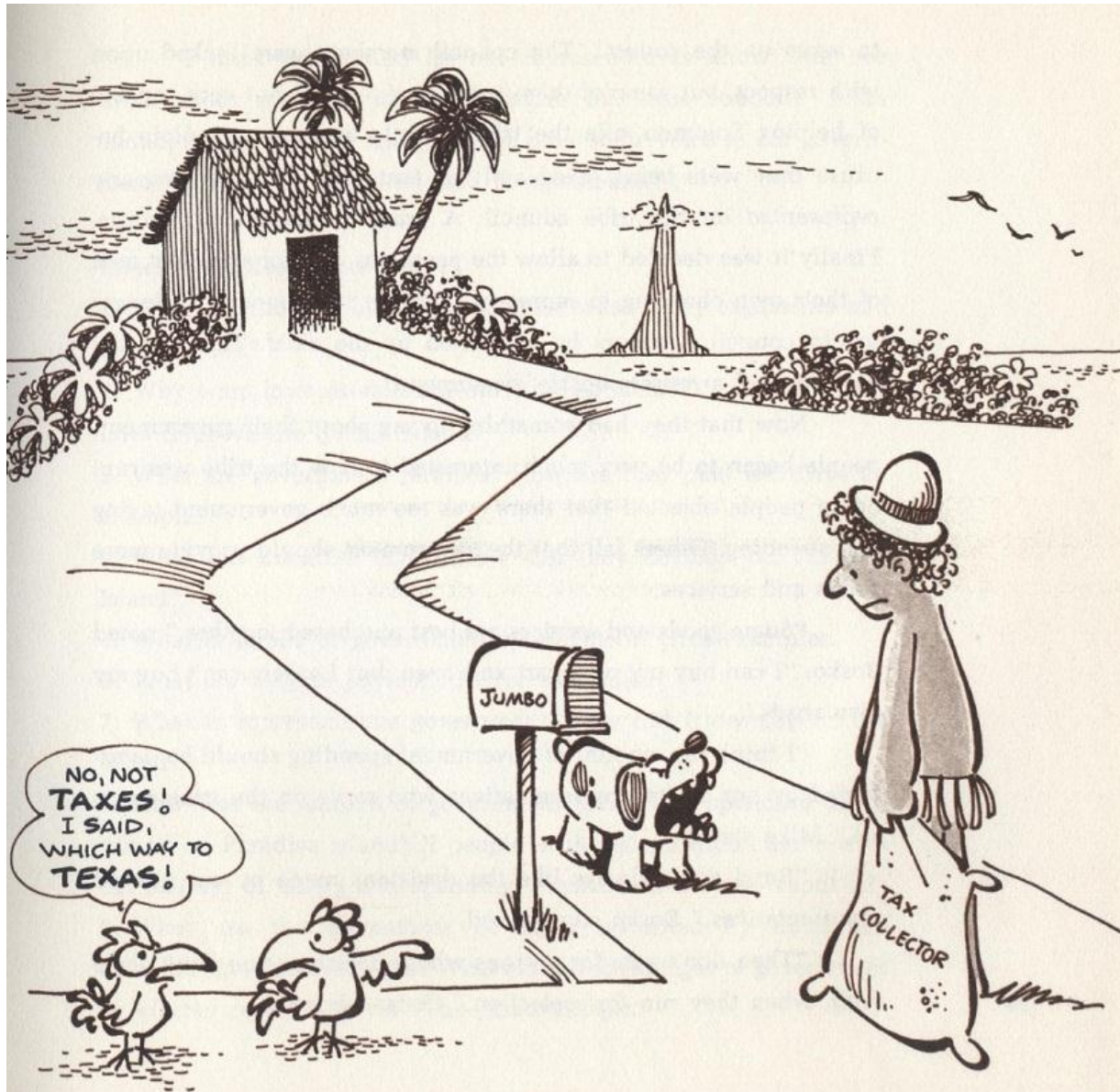
One day at a meeting of the tribe council Slim Jim said, "I have been thinking about this problem of water. Many people now are planning to bring their own water down from the mountains. I'm afraid that pretty soon some of us will not have any water supply because the others will have taken it all. Water belongs to everybody. Some of us live too far away to bring the water down to our huts and our gardens. I suggest that we tax everybody and build a system of large canals to bring water down for everyone."

Many members opposed this idea because they argued that the government should not do things for the people that they could do for themselves. Others argued that it was impossible for some people to arrange for their own water supply and that without a public water system a few people would get control of all the water.

After much discussion, the tribe council agreed that a water system for everyone would be less expensive than having each individual provide his own supply. The council made some new rules and raised the taxes so that the water system could be built.

The roads, the police force, and the water system were first government or public services. New services were added later, such as public education and parks. People had to pay for these services with tax money or contribute a certain amount of labor.

Governing the island became more complicated. Chief Solomon began to complain that he had too much to do, seeing that the people obeyed all the laws, and supervising all public services. So the council decided to increase the police force to help the chief enforce the laws, and to hire an assistant who would keep the records of taxes paid and public money spent. People were also hired to repair the roads and keep the canal system in good condition. Thus the number of public employees grew.



Under the old customs of the tribe, the chief appointed men to serve on the council. The council members were looked upon with respect, but some of them were very old and not very capable of helping Solomon rule the tribe. People began to complain because they were being taxed and felt that they were not properly represented on the tribe council. A great discussion took place. Finally it was decided to allow the people to vote for and elect men of their own choosing to represent them on the council. No longer would council members be appointed by the chief. This was the beginning of a representative government.

Now that they had something to say about their government, people began to be very much interested in how the tribe was run. Some people objected that there was too much government taxing and spending. Others felt that the government should provide more goods and services.

"Some goods and services are best purchased together," noted Bosko. "I can buy my own cart and oxen, but I surely can't buy my own roads."

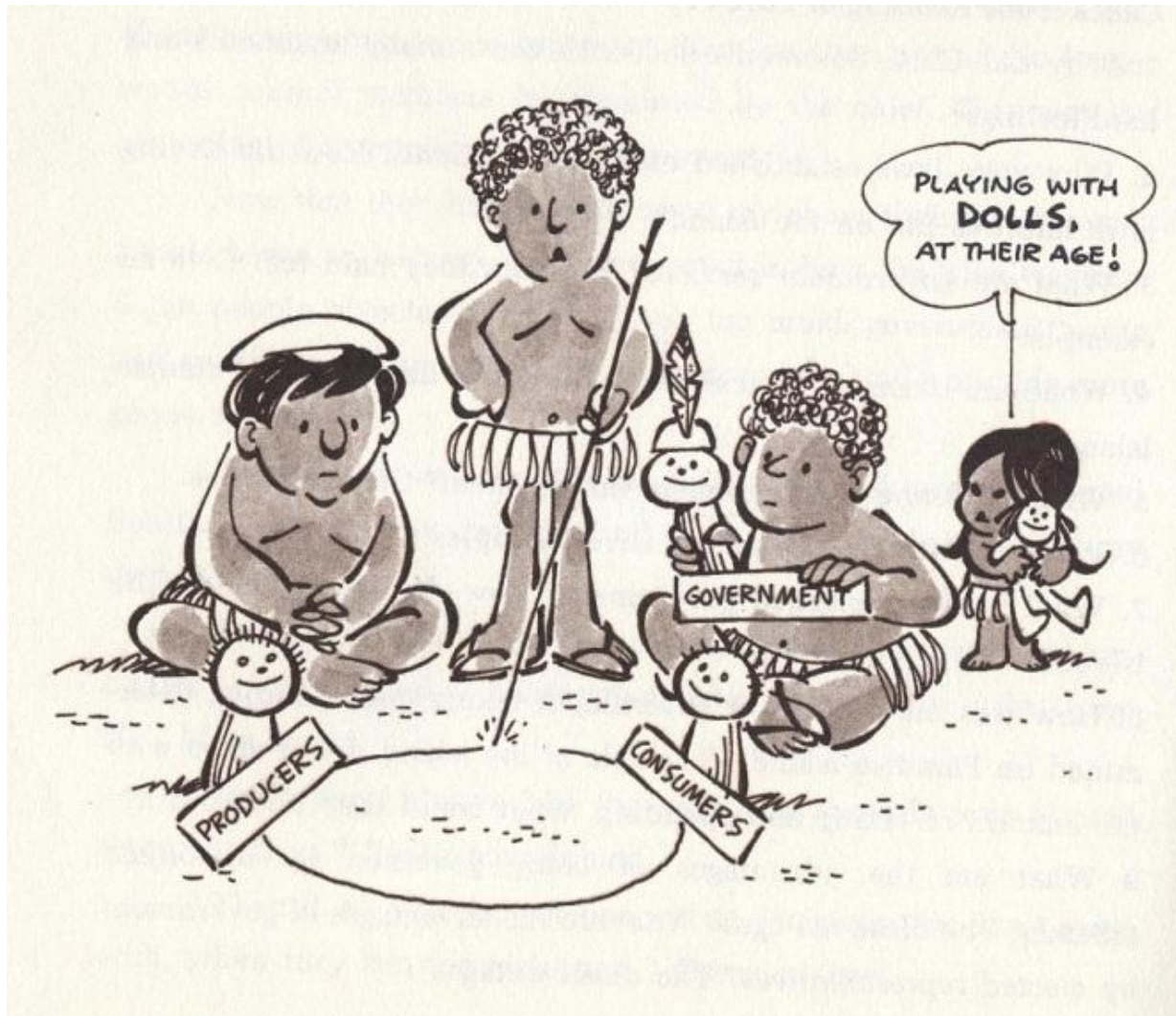
"I think the amount of government spending should be determined by our elected representatives who serve on the tribe council," Mike stated.

“But I don’t always like the decisions made by our elected representatives,” Bosko complained.

“Then don’t vote for persons whose decisions you don’t agree with, when they run for reelection,” Oscar advised.

“I think we should let our representatives know what we think about matters that come before the tribe council,” Mike added. “Then we will really feel we have some voice in our government” Oscar and Bosko nodded in agreement.

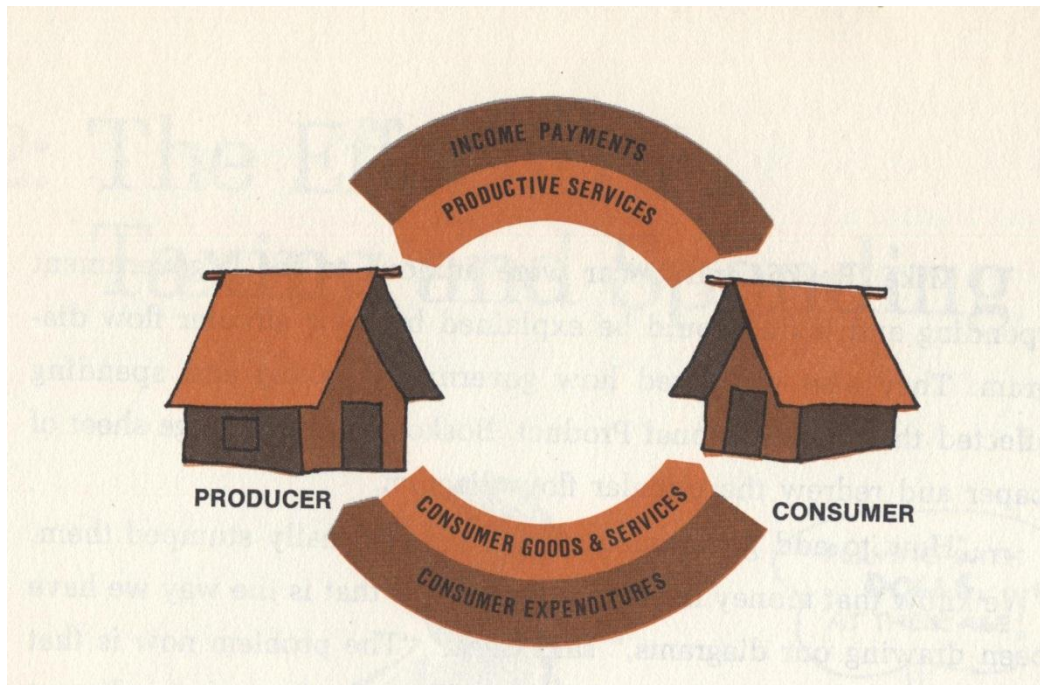
The Effects of Taxing and Spending



Mike, Bosko, and Oscar were anxious to see if government spending and taxing could be explained by their circular flow diagram. They also wondered how government taxing spending affected the Gross National Product. Bosko took a large sheet of paper and redrew the circular flow diagram.

How to add government to the picture really stumped them. "We know that money flows in a circle, and that is the way we have been drawing our diagrams," said Oscar. "The problem now is that government, by taxing, can take money from the flow of spending at any place in the circle—from consumer expenditures or income payments—and can put it back into the flow at any point, by spending on wages or purchases."

"Well, let's start drawing and see what happens," said Bosko. "Aaaaahhhh, is government a producer, or a consumer?"



"That is one of the things that makes this problem so tricky," answered Oscar. "Government is a producer of services such as road construction, but it is also a consumer."

"I get it," Bosko went on. "Government consumes the things it buys to build the roads, and the record books and money boxes that the tax collectors need, and other things."

"Exactly," nodded Oscar. "But besides being both a producer and a consumer, which all three of us are also, the government does some things that we don't do. It collects its income from the people on the island in the form of taxes; then it gives some of its income to people in the form of welfare payments. When the government is making these welfare payments, it is really just transferring money from some people to some other people. So why don't we call them transfer payments, and the government a transfer agent?"

Mike scratched his chin thoughtfully. "So we really have put government in our picture in three different places: (1) as a producer of government services, (2) as a consumer of goods and services, and (3) as a transfer agent."

Bosko handed the paper and pencil to Oscar. "Oscar, you better go on with the diagram. I don't know where to start."

Oscar waved it away with a laugh. "No, Bosko, you keep it. We'll work this out together. Maybe if we decide where government goes in our Gross National Product equation it will help us decide where to put government in our diagram."

"Well," said Mike, "since the Gross National Product includes the dollar value of all goods and services produced year, the dollar value of government production will have to be added."

Bosko picked up the flow chart. "Before, we said total dollar value of the Gross National Product was equal consumer expenditures plus business investment," he said

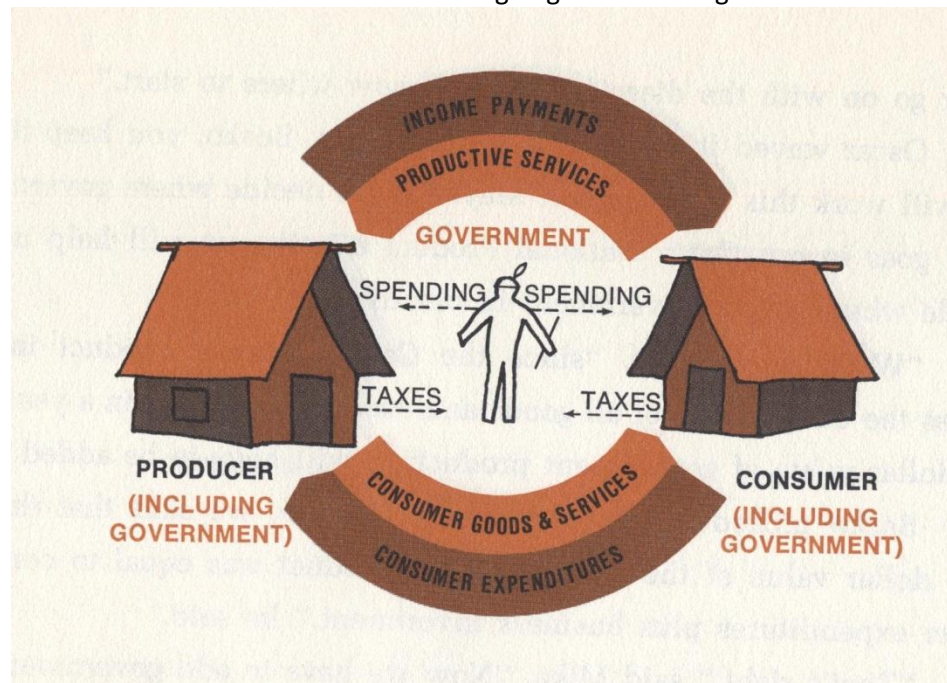
"That's right," said Mike. "Now we have to add government spending. Bosko, at the bottom of the paper, write 'Consumer Expenditures + Business Investment + Government Spending = Gross National Product.'"

With a big smile, Bosko wrote $C + I + G = GNP$.

"Your equations are getting pretty fancy," laughed Oscar.

"Now, I started it just as I said I would," said Bosko. "Here, Oscar. All you have to do is put government into the picture."

"All right," said Oscar, beginning to draw. "I guess the place for government is right in the middle of the flow. We use arrows to show that government takes money out of flow in the form of taxes, and puts money into the flow in form of government spending. Then we write 'including government' under both 'Producer' and 'Consumer.' But how are going to show the government as a transfer agent?"



"We don't have to," said Mike. "When the government acts as a transfer agent it really doesn't change the Gross National Product. No products or services are produced. Some people have less to spend because they paid some of their money in taxes, and some people have more to spend because they have received welfare payments. But the total spending for the nation hasn't changed."

"Well, that's right!" said Oscar, as he held up the drawing. "There it is. It looks as if we have found a way to explain government in our circular flow diagram."

Mike, Bosko, and Oscar now felt that they had a good picture of how the system on the island operated. To find out just how large the Gross National Product was, they needed only to add up (a) Consumer Expenditures, (b) Business Investments, and (c) Government Spending. Or, as Bosko liked to write it: $C+I+G=GNP$.

The three men decided that GNP could rise or fall, depending on certain conditions. If consumers as a total group spent less, GNP would be smaller. If businesses invested less in buildings and equipment, GNP would be smaller. If government spent less, GNP would be smaller. And if any one of the three (C, I, or G) spent more, GNP would be larger. If the GNP, the dollar value of all goods and services, were to rise, but the total volume of goods and services did not increase, goods and services would simply cost more. The additional money would bid up the prices of the goods and services that were for sale. In other words, the same goods would sell for more money. If this happened, people would not be better off just because GNP increased. This condition would mean inflation rather than any improvement in the way people were living.

One more thought occurred to Mike, Bosko, and Oscar. The number of people who shared the GNP would make difference. If population increased and GNP stayed the same, each person would have fewer goods and services to enjoy.

"We have been saying that GNP is the dollar value of goods and services produced in a year," said Mike. "But the real value of GNP is the amount of goods and services available each member of the population."

"There seem to be several possible ways to add to the GNP," added Oscar. "Sometimes some people are out of work, business buildings are not being used. These people and buildings are *resources* which are not producing anything. If these resources could be used, more goods and services could be produced. If consumers could be urged to buy more goods, businesses would probably employ more workers to produce more and it would use more of the buildings available. The government could encourage consumer spending and business investment by cutting taxes, thus leaving more money available for spending. Or the government could employ idle workers, and their wages would buy more things."

"But if most people were working and buildings and equipment were in full use, increased spending would not increase the amount of goods and services available. In that case, higher GNP would merely mean that more dollars were used to buy the same amount of goods and services. And, as we know, that would be inflation," Mike pointed out.

Bosko looked worried. "What can be done to stop inflation?"

"There are at least three things that can be done," Oscar answered. "The effects of inflation can be reduced if (1) consumers save more and spend less, (2) producers make fewer investments, or (3) the government spends less and taxes more."

"You can see that from our equation, Bosko," added Mike. "We said that $C + I + G = \text{GNP}$. If you have inflation and want to stop it or slow it down, you must lower GNP. You can do this by decreasing consumption (C), or business investment (I), or government spending (G), or any combination of them.

"But," Mike went on, "suppose you have the opposite situation — deflation — with dropping prices, decreased production, and people without jobs. What can be done to stop it? Well, you must try to raise GNP. An increase in any one of these (C, I, or G) or an increase in any combination of them will increase GNP."



For many years the people of Paradise Island had had nothing to do with tribes on other islands. As a matter of fact, the tribes were afraid of each other. But one day, on a fishing trip, Big Joe and his partner Charlie were caught in a storm. Their boat was blown ashore on Plentiful Island where the Bountiful Tribe lived. They were captured and held prisoners for a while, but they finally convinced the members of the Bountiful Tribe that they were friendly and meant no harm. They were turned free and were allowed to repair their boat so that they could return home.

While on Plentiful Island, Big Joe and Charlie discovered that the Bountiful Tribe had some goods that they had never seen before. The tribe had been cultivating corn and making a new and better type of sandal. Joe and Charlie told the members of the Bountiful Tribe that they would like to go back home and return with a load of goods, strange to the Bountiful Tribe, and trade with them. The tribe agreed. So Big Joe and Charlie went back to Paradise Island. They loaded their boat with goods and went back to Plentiful Island where they were eagerly received and quickly traded their goods.

There was much excitement when Big Joe and Charlie returned to Paradise Island with the corn and sandals. The men were able to sell their goods easily, and when they counted their money they discovered they had made a good profit.

When they saw the success of Big Joe and Charlie, some of the other fishermen began hauling goods and trading between the two islands. This was the beginning of foreign trade for the Paradise Islanders. Each tribe lived better because of foreign trade, because now the people had a greater variety of goods—different foods, clothing, and even new kinds of tools. The men who hauled the goods in their boats were kept busy sailing back and forth between the islands, and their trading was very profitable.

Mike, Bosko, and Oscar wondered if foreign trade could be explained in their circular flow diagram. They also wondered how foreign trade affected the Gross National Product. Once again they decided to draw a picture of the economic system, but this time including foreign trade.

Oscar explained, "When we buy goods and services from Plentiful Island, some of our consumer expenditures are

switched from Paradise Island to Plentiful Island. The money is no longer available to spend on Paradise Island. When members of the Bountiful Tribe buy goods and services from Paradise Island, the money they pay is put into the money flow of Paradise Island. More money is available here."

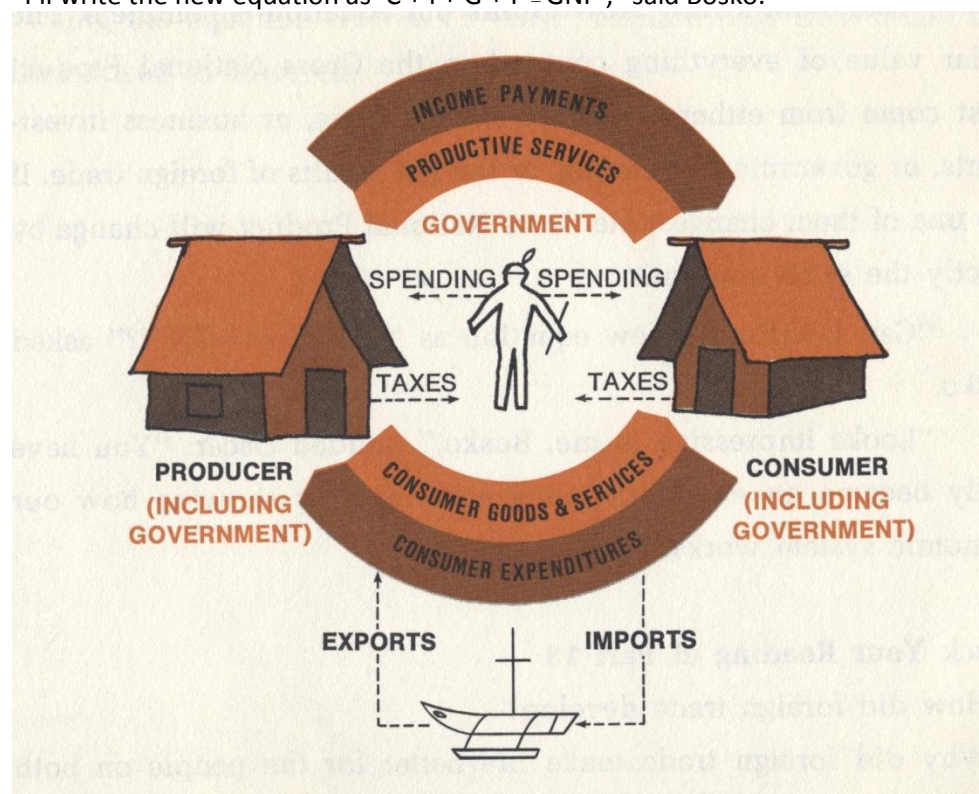
"To see how foreign trade affects the GNP is really quite simple," Mike added. "If more money leaves Paradise Island than enters, GNP is smaller. If more money enters Paradise Island than leaves, GNP is larger." Mike, Bosko, and Oscar were now ready to add foreign trade to their equation.

Mike observed, "Since we started trade with Plentiful Island, more money has entered Paradise Island than has left. We have exported more goods to Plentiful Island than we have imported from them. When we subtract our imports from our exports, we have a money balance, or difference. This difference we can call net exports."

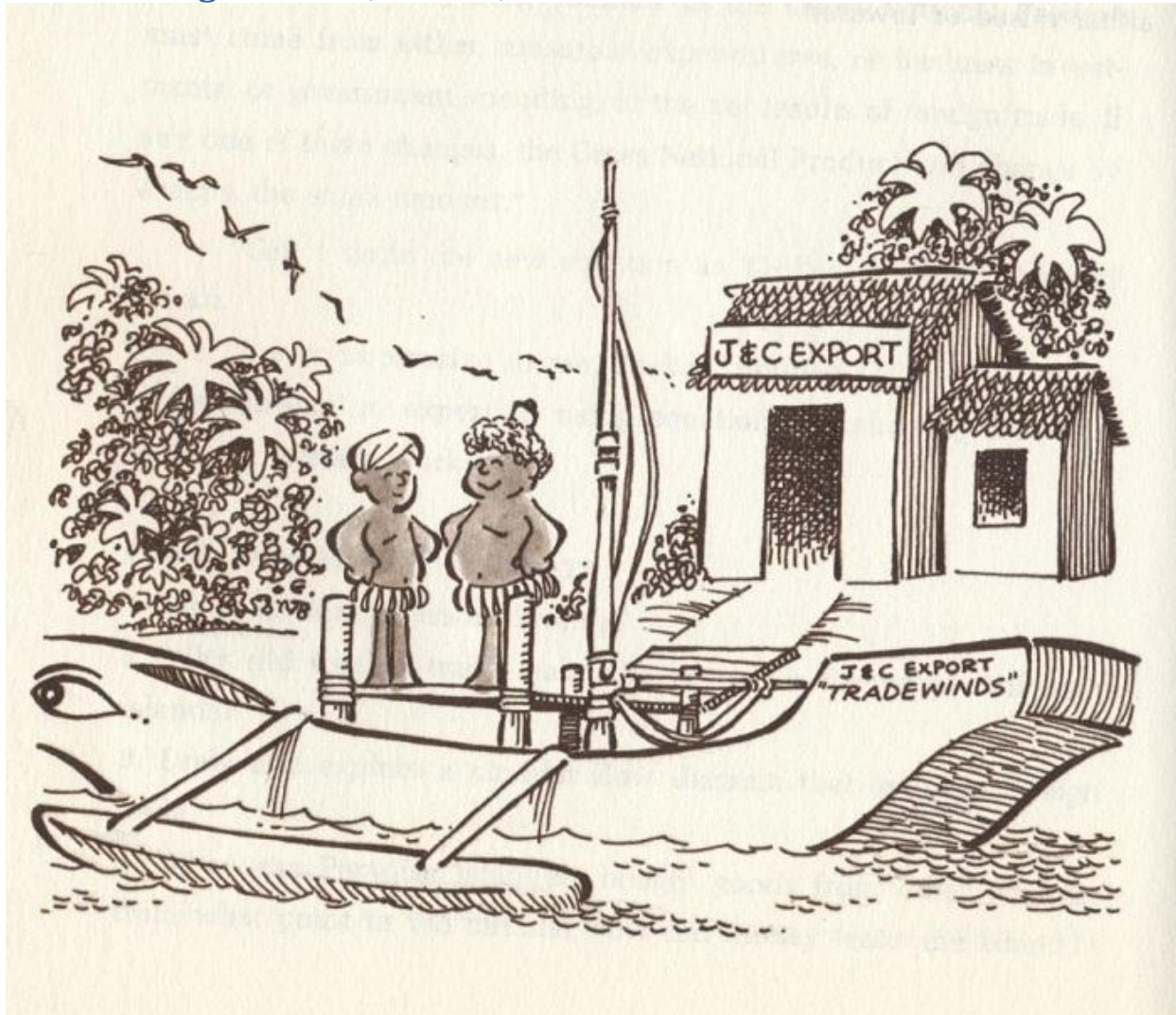
"Then we have to explain the results of foreign trade in terms of our net exports, don't we?" asked Bosko, picking up the pencil.

"Yes," said Mike. "Now I think our equation is complete. The dollar value of everything counted in the Gross National Product must come from either consumer expenditures, or business investments, or government spending, or the net results of foreign trade. If any one of them changes, the Gross National Product will change by exactly the same amount."

"I'll write the new equation as ' $C + I + G + F = GNP$,'" said Bosko.



Business Organization, Unions, and Insurance



As years passed, considerable trade developed with Plentiful Island. Many of the Jubilant tribesmen fitted out boats and sailed back and forth between the islands with goods to trade.

Flashy Gordon, like most of the men, owned and operated his boat alone. Gordon liked to be in business for himself. Such a business was called a sole proprietorship because one person owned all of it. Some boat owners employed additional workers during busy times. These workers earned wages. The owner, sole proprietor, paid himself a wage, but also earned profits and took losses for the business risks he undertook.

Big Joe and Charlie owned their boat together. They were partners; their business was a partnership. They shared equally in any profits or losses that resulted from their joint work. When Elmer helped them, he received wages, but none of the profits.

Some of the members of the tribe joined together in what they called a cooperative. They owned a beautiful large boat together, which no one of them could have owned alone. They employed Jerry to manage their business and paid him a wage or salary. Each owner had one vote when major decisions had to be made—no matter how much money he had invested or how much business he did with the cooperative. At the end of the year, each member of the cooperative received a share of the profits.

according to the amount of business he did with the cooperative.

Big Joe and Charlie had been dreaming of a much larger boat, like the one owned by the cooperative. But building it was out of the question—they did not have enough money.

One day they talked to Mr. Moneybags. They wanted to borrow the money from him, but he would not lend it unless he could have a share in their business.

Mr. Moneybags wanted a chance to earn a little extra profit, so he said to Joe and Charlie, “I think you are good businessmen. I trust you. I suggest that we start a new kind of business— an import-export company—to be called J & C Export. If you can find five other people to invest money to build the boat, I will also invest some money in the business.”

Because Mr. Moneybags was respected, Joe and Charlie had no trouble finding other investors. It was agreed that the money each person invested would not be a loan, but would represent a share of ownership in the business. These shares were called stock, and each investor would receive profits according to amount of stock he held—in other words, the money he invested.

The investors formed the first corporation—a business by stockholders. All the stockholders elected five men to a board of directors who then elected officers to run the business, Joe became president and Charlie vice-president.

Joe and Charlie would manage the business and would receive a salary for their services. Since the two men were investors, they shared in the profits of the business. Elmer worked for them, and later several other people were hired.

One day, Elmer asked Big Joe and Charlie for a salary raise. Joe and Charlie knew that Elmer was a specialist at making fishing nets and was performing a valuable service for the company. But J & C was the only company that employed a time net maker. Since it would be hard for him to get another job, they decided that Elmer would probably continue to for J & C even without a raise.

J & C, like other businesses on the island, tried to keep costs of running the company as low as possible. If Joe Charlie could hold wages down, they could either sell goods at a lower price or distribute more profits to the people who had invested money in the business. More importantly, Big Joe and Charlie were worried that if they did not keep their expenses down, their business might fail. So many businesses had sprung up on the island that there was great competition among them for customers, and many businesses had failed. A businessman had to have the right goods and services available at the right time, at the right price, and in the right place. Otherwise, he would not be able to compete with other firms and might lose his business.

Elmer was disappointed that he did not get the raise, for knew that some workers on the island had received wage increases. . But he was pleased that he had not lost his job like some others had when business slowed down during the slack season.

Joe and Charlie settled each wage question with the worker involved. Some workers were able to convince Joe and Charlie that they should be paid more; others were not so successful.

This gave Elmer an idea. He reasoned that (a) Joe and Charlie wanted wages to be as low as possible, and (b) workers wanted wages to be as high as possible. Workers as a group could probably get better wages if they joined together to bargain with Joe and Charlie, rather than for each worker to bargain individually.

Elmer called a meeting of all the employees of J & C to present his plan. After much discussion, the workers decided to join together to form an organization, called a union, which would handle all bargaining with Joe and Charlie.

Each month the workers paid a small amount of money, called dues, to support the union’s activities.

Slim Jim was appointed to *represent* the union members in all wage discussions with Joe and Charlie.

Jim informed Joe and Charlie that from now on all bargaining for wages would be done as a group—that is, collectively. Joe and Charlie did not want to go along with the plan, but Slim Jim told them all of the workers would strike if they refused. Joe and Charlie didn’t want work to stop, so they finally agreed.

Thus collective bargaining was introduced to Paradise Island.

Mike, who was always on the lookout for a profit, had invested in the J & C Export Corporation when it was formed. At the end of the first year of business, he received his share of the profits, called a dividend. The dividend was more than the stockholders had expected, as the corporation had had a very good year.

Mike was pleased with the return he had received from his stock in J & C. However, he needed additional money to expand his Mill and Trading Post and the dividend was not enough.

Julie, a friend of Mike's wife, Pat, had some money she wanted to invest. Julie did not want to run a business of her own, but she did want an opportunity to earn profits. She believed that she could earn more money by investing in a well-managed business such as J & C than she could by lending her money for interest.

Julie got an idea. "Maybe I can talk Mike into selling me the stock he has in J & C," she thought. "I will offer him more than he paid for it, since the dividends are good."

Mike liked the idea of being able to sell his J & C stock for more than he had paid for it. Mike and Julie agreed on a price for the stock, and Julie became part owner of the corporation.

As trade increased, several men built larger boats and began making trips to other islands. It was discovered that each island produced items that were new to Paradise Island. People on Paradise Island now had a great variety of products.

It took a lot of work to build a boat. Some of the men borrowed money to pay workers to help build their boats. They repaid their loans, with interest, from the profits they made in trading.

Occasionally a boat would be lost in a storm or would be wrecked on hidden rocks. In each case, the loss of the boat and the loss of the goods caused great distress to the owner. Some trading businesses failed because they could not make up their losses.

One day Flashy Gordon hauled a load of goods to another island and was returning home when he was caught in a storm that sank his boat. Fortunately, he was rescued by a fisherman.

Gordon had to build a new boat somehow; trading was his livelihood. His friends got together and decided they would contribute a little of their time and money to help Gordon build a boat. He was thankful, but it bothered him to accept these gifts.

When his boat was completed, he called his friends together and said, "I appreciate your help, but several of us have lost boats, and the goods we carried were lost. Our friends who owned these goods suffered a loss just as we did in losing our boats. I have a plan so that if accidents happen in the future we can pay the losses without any great burden on anyone.

We have been losing about one boat a year, and there are fifty boats operating. So I suggest that each of us who owns a boat should pay 1/50 or 2 percent (2 cents of every dollar) of the value of his boat each year into a fund. Then, if a boat is lost, we can pay for a new one out of this fund.

"In addition, I suggest that the owners of the goods pay 2 percent of the value of each shipment of goods into this fund, so that if the goods are lost, the owners can be paid for their loss."

All the boat owners were enthusiastic about this idea. They consulted the shippers of goods, and they were also enthusiastic. They formed an organization, the Shippers' Protective Association, and began making payments into the fund; these payments were called premiums. The money was put in the bank. This plan for protecting property against loss was the beginning of insurance.

The plan worked very well, and all the members of the association felt secure knowing that their property was insured.

One year, however, two boats were lost, and there was not enough money in the fund to buy two boats. It was decided that all members should make an additional payment into the fund, which was called an assessment. The members of the association then decided to raise the yearly premium rates to 3 percent of the value of each boat, in order to have an extra amount of money in the future to avoid any further assessments. The plan continued to work very successfully. After several years, there was more

money in the fund than was needed, because on the average one boat was lost each year, so the members reduced the premium rates to 2 percent.

One day a man named John was out in his boat and was caught in a bad storm. The boat sank, and he was drowned. John had a large family. Friends gave them food and clothing, but they still had a hard time. Other deaths of family men had worried the people, too. There was no way to take care of widows and children except through gifts of friends and the welfare payments from the tribe, which were not enough to support a family for a long time.

One of the men who worried about the families went to Chief Solomon and said, "If insurance is good for boats and goods, why wouldn't it be good for people? I would be willing to pay money into a fund with other men of the tribe, so that if I die my family would be paid some money from this fund."

Solomon thought this was a good idea, so he called a meeting of the tribe to discuss the proposal. Most of the men liked the plan and were willing to contribute to a fund. Some wanted to contribute only a little, but others wanted to pay a larger amount.

The men decided to form an association and to sell shares in any amount that a member would want to buy, paying premiums for these shares. A paper, called a policy, was drawn up for each member, stating the size of his share. It was agreed that the widow and children of each policyholder would be paid, upon the death of the policyholder, a certain amount of money, depending upon the size of his share.

The association was named The Family Protective Association and was the beginning of life insurance.

After a few men had died, and payments had been made to their families, others who did not belong to the association saw what a good idea it was and wanted to join. Finally, almost every man on the island had insurance. It was no longer necessary for relatives and friends to support widows and children, because they had received insurance payments and could support themselves.

The Effects of a War



Nip and Tuck, two young men who had always caused trouble on Paradise Island, decided one day to sail to Plentiful Island. They were welcomed and trusted, but one night they stole some corn and loaded it into their boat. The theft was discovered as they were sailing *off*. Nip and Tuck returned safely, but a few nights later a great fleet of twenty boats from Plentiful Island sneaked into the harbor of Paradise Island. The men in these boats came ashore and killed many people. War had begun.

Groups of men sailed back and forth between the two islands for many months, fighting, stealing, and destroying property. The tribe council called together all the strong men on Paradise Island to form an army. Men hired by the government were building boats as rapidly as possible; others were busy making bows, arrows, and spears. While these men were busy with preparations for war, they could not be fishing, hunting, raising food, or running their businesses. In order to pay for all this labor, and to pay the army, the council agreed to increase taxes.

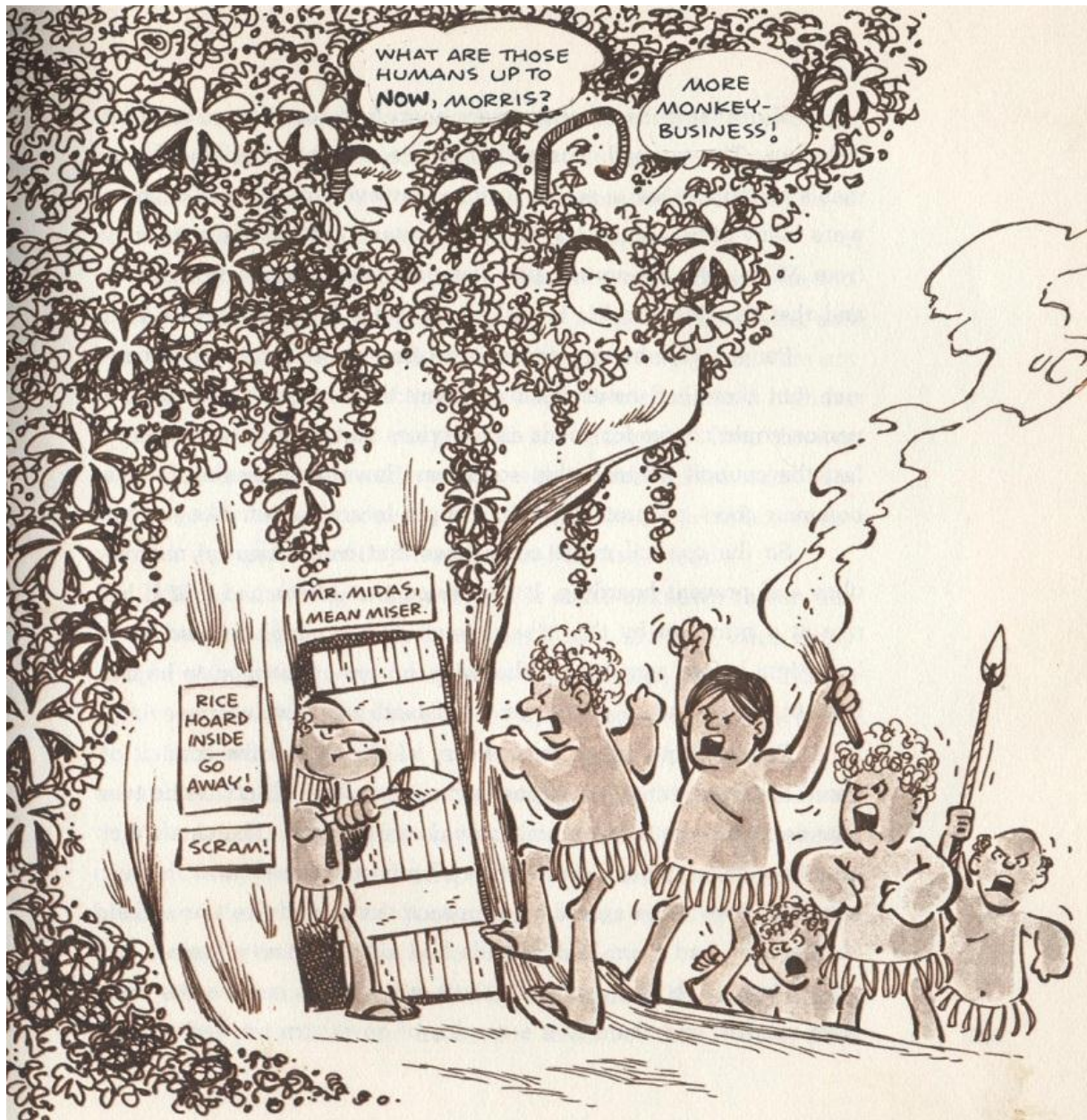
Almost everyone on Paradise Island had a job. There was full employment. Because everyone was working, more goods and services were produced, and the Gross National Product increased. But since so much effort was going into preparation for war, there were fewer goods available for all the people—

consumer goods became scarce. Even though people paid more money in the form of taxes, prices increased, because (a) nearly everybody was trying to buy the scarce articles, and (b) there was more money on the island because of full employment and efforts to provide money for carrying on the war. The island was experiencing inflation.

Women, children, and old men were pressed into service to make arrows and spears and to produce food. There was plenty of money, so as people bid against each other to buy scarce goods, prices continued to increase. The tribe council again increased taxes (a) to pay for goods and services needed in the war effort, and (b) to reduce the amount of money available so people would not bid prices so high. Even so, inflation continued.

As certain items became scarce, some people began to hoard them. A few people had more than they needed, but they continued to buy and hoard these goods because they were afraid they could not get them when they wanted them.

Midas, who was very good at accumulating money, started thinking about how he could take advantage of the situation. Less rice was being raised than before the war, but Midas started buying all he could get, even at high prices. Soon he had most of the rice on the island in his cave. Because he controlled the supply of one product, he had a monopoly. People had to come to him for rice, and he charged them very high prices—much more than he had paid for it.



Midas' neighbors became very angry and complained to Chief Solomon. The council was called to discuss the problem of one man's monopoly of a scarce article that everyone wanted. There were many bitter arguments. People threatened to take the rice away from Midas, but he argued that Paradise Island was a free nation and that the rice was his to sell at any price he could get for it. People were hungry and rice became more scarce and expensive, but there had never been any laws that would control what a person could charge for goods and services that he sold to others. At last the council decided that some new laws were needed to protect all the people in a situation like this. So the council made some laws that would control monopolies and prevent hoarding. It also ruled that Midas had to sell his rice at a price set by the tribe council. The council debated for a long time before agreeing on the price, because it wanted to be fair both to Midas and to people who needed rice. Finally, both tribes grew weary of war. The tribe council of Paradise Island voted to propose a meeting of the chiefs of the two islands to discuss terms which would end the war. The chiefs met on a boat

halfway between the two islands, and later met with their councils. Both sides agreed to the peace terms, and the war ended. Neither side had won; both islands had suffered heavy losses.

Now, with the war over, there were many more boats than were needed, and there was a surplus of bows, arrows, and spears. The government stopped producing war materials. Most workers went back to their old jobs, but there were not enough jobs for everyone, so the council decided to build more roads to give jobs to some of the men. Their wages were paid from taxes.

Many women and older men who had worked during the war did not work after the war. Because fewer people were working and because some buildings used for producing wartime goods were not in use, total production declined. GNP fell. Prices remained high for a time, however, because people still had money left from the war when consumer goods and services were scarce. But as more consumer goods were produced, prices began to drop. Inflation decreased, and price stability returned.

Then something went wrong. For some unknown reason, the production of goods and services went down. GNP fell. Soon many people were without jobs; they were unemployed. As they did not receive wages, there was less money spent for goods and services.

Businessmen could not sell their goods easily, so they competed with each other for customers by cutting prices; Many of them had to lower prices so much that they suffered losses. Some businessmen could not stay in business because of these losses, and the number of business failures increased. Soon many business buildings were not in use. It was a time of deflation on Paradise Island.



Mike wondered if he could help the situation by using what he had learned about GNP, and he went to Chief Solomon and the tribe council. "Business is bad," he explained, "and to increase the Gross National Product we must increase any or all of the following: consumer spending, business investment, government spending, or net exports which result from foreign trade. If we increase any of these, the GNP will increase, since $C+I+G+FGNP$."

Ken, a member of the tribe council and a friend of Chief Solomon's, stated, "I think we should increase government spending. The members of the tribe need many things which can best be bought collectively. For example, we need better schools, improved roads, more libraries, and more parks. In this way, we can provide public services needed by the people, and at the same time increase GNP."

Walter, who served as an adviser to Chief Solomon, said, "I agree that there are many things that the government could provide for the tribe, but let us consider another way to increase production. If the government were to cut both consumer and business taxes, production would increase. People would have more money to spend, and as a result the demand for goods and services would increase. The increase in demand together with lower business taxes would encourage businessmen to invest in buildings and equipment so that they could increase production of goods and services. In addition to using buildings that are now vacant, they would invest in new ones, and they would employ more workers. The increase in employment would create more wages with which to buy the increased supply of goods and services. Thus, by cutting taxes, we can let people decide for themselves how they would like to spend their money and at the same time increase GNP."

The tribe council argued a long time. Some members agreed with Ken. Others agreed with Walter.

Finally, the council agreed to cut taxes and also increase government spending somewhat.

The tax cut and the increase in government spending had the effect Mike predicted. Soon production (GNP) increased. Deflation ceased to be a problem, and once again price stability returned.

One day Mike and Oscar came upon Bosko in the Trading Post. He was looking at the circular flow diagrams and grinning.

"Did you hear Walter and Ken the other day when they explained how we can have price stability?" Bosko asked.

"Of course we did," Oscar answered. "They made good use of our circular flow diagrams and our equation, $C + I + G + F = GNP$, didn't they?"

"That's just the point," said Bosko. "The diagrams, the equation, and all the other stuff we have learned about life on Paradise Island can be used to make this a better place to live."

"Yes," said Mike, "we have seen a good example of how this type of knowledge can be put to use. I'm certain that we will learn even more ways to use this type of information as we gain experience. In time we should, for example, be able to avoid severe booms, inflation, or severe busts—deflation or depression."

"One thing is certain," Oscar added. "We must understand the system if we expect to maintain and improve it."

They all agreed.

"We will be famous, Mike," Bosko beamed. "Since we named money after Mr. Moneybags, could we name this type of knowledge after me? I have thought of a great name. Let's call the study of how people produce and consume goods and services *Boskonomics*."

And so they did.

Summing It Up



Life on Paradise Island describes the development of a simple economic system, yet the economic principles presented in the story are common to all societies, simple or complex. All of these principles can be related to modern-day economic systems.

The basic economic principles incorporated into the story of *Life on Paradise Island* are these:

1. Since our wants are greater than the resources available to satisfy them, people must economize, that is, make choices as to how resources are used.
2. Every society, no matter how primitive, has some form of economic system which determines (a) what goods and services will be produced, (b) how the goods and services will be produced, (c) how the production will be maintained and increased, and (d) how what is produced will be shared among the people.
3. Specialization tends to increase efficiency and production. Tools and machines (capital) increase production.
4. Production of goods and services is limited by the resources available—labor, management, tools and machines (capital), and land. Wages are earned for services performed. Profit is a return for business risks taken and services performed. Interest is earned on money loaned to others. *Rent* is earned on

land or buildings used by others.

5. All economies, even the most primitive, have a dynamic (active) system of flows (flow of goods and services and flow of money).

6. Wages, profits, interest, and rent are stated *in* terms of money. But the amount of goods and services that money will buy is not *always* the same because prices change. Real wages, for example, are what money wages will buy. The efficiency of the economic system determines the supply of goods and services available and the prices that people will pay for them.

7. Competition tends to increase efficiency and to regulate prices and profits.

8. Certain social inventions have been created:

- a. Money serves as a medium of exchange and aids the flow of goods and services.
- b. Financial institutions (banks) create and aid the flow of money.
- c. Business organizations are designed to provide production of goods and services.
- d. Labor unions are designed to create better working and living conditions by actions such as collective bargaining.
- e. Insurance is designed to provide a method of risk sharing.

9. War causes some items to be scarce because effort is devoted to producing materials for war instead of the usual goods and services. When the amount of money available for personal consumption increases in relation to goods available, prices rise. A period of constantly increasing prices is called inflation. A period of constantly decreasing prices is called deflation.

10. The Gross National Product (GNP) is the dollar value of all goods and services produced in an economy within a given time period. GNP is determined by adding (a) consumer spending, (b) business investments, (c) government spending, and (d) net exports resulting from foreign trade. A change in the economic activity of any one of these segments of GNP will affect total GNP, since $C + I + G + F = \text{GNP}$. As we learn more about economics, we should be able to maintain a stable and growing GNP without severe inflation and deflation.