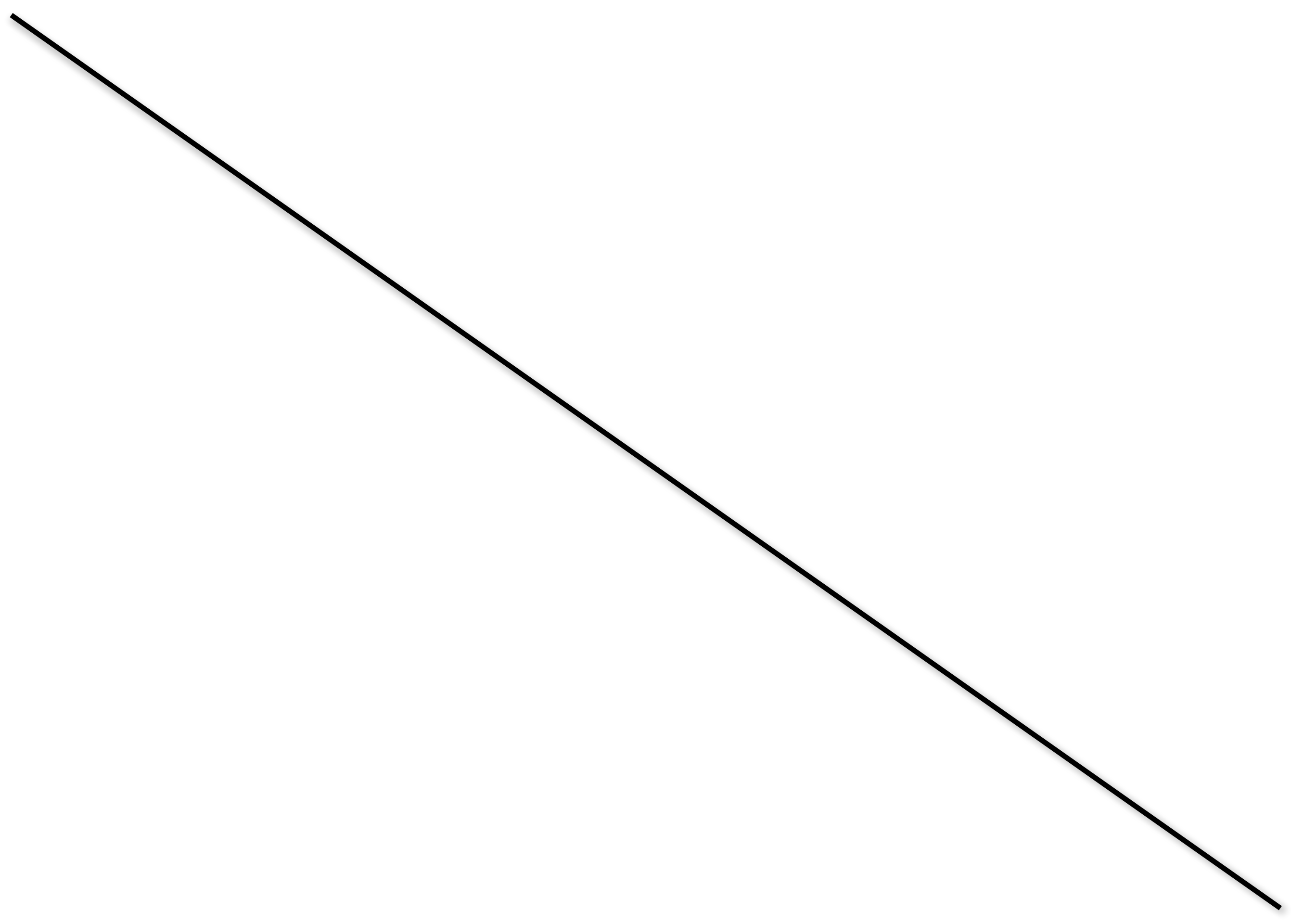




**M**







**P<sub>2</sub>**

P

1

Po



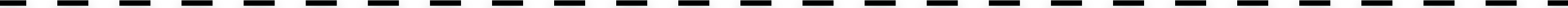
Q.0

Q\_e

**Q1**







1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

26

27

28

29

30

31

32

33

34

35

36

37

38

39

40

41

42

43

44

45

46

47

48

49

50

51

52

53

54

55

56

57

58

59

60

61

62

63

64

65

66

67

68

69

70

71

72

73

74

75

76

77

78

79

80

81

82

83

84

85

86

87

88

89

90

91

92

93

94

95

96

97

98

99

100

101

102

103

104

105

106

107

108

109

110

111

112

113

114

115









**B**

C



**E**

G





**F**

J

**K**





Example: Suppose  
the price is  $P_2$

Consumer Surplus = The  
triangle area below the  
demand line and above the  
price the consumer pays



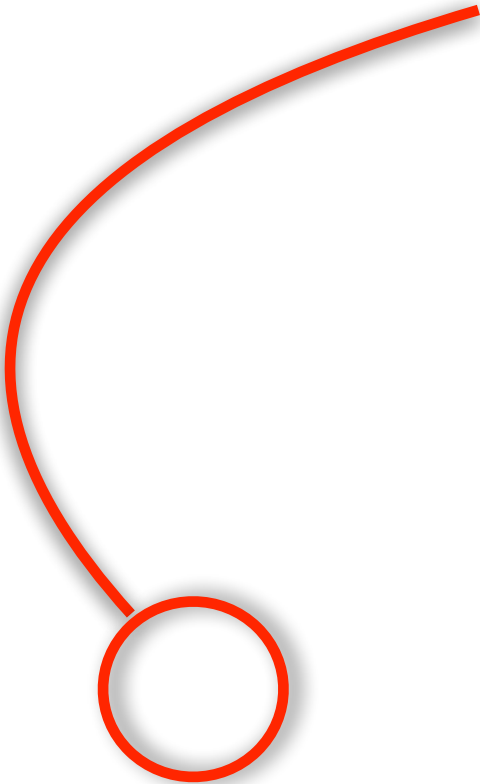
CS





L

Producer Surplus is the area  
above the supply line and  
below the price the  
producer receives




Consumer Surplus = Area L

Producer Surplus = Areas K + J + I

$$\text{Welfare Loss} = \text{Areas M} + \text{H} + \text{G} + \text{F} + \text{E}$$

Tax to: Consumers who lose areas  $K+J$



Subsidy to: Producers who gain areas  $K+J$

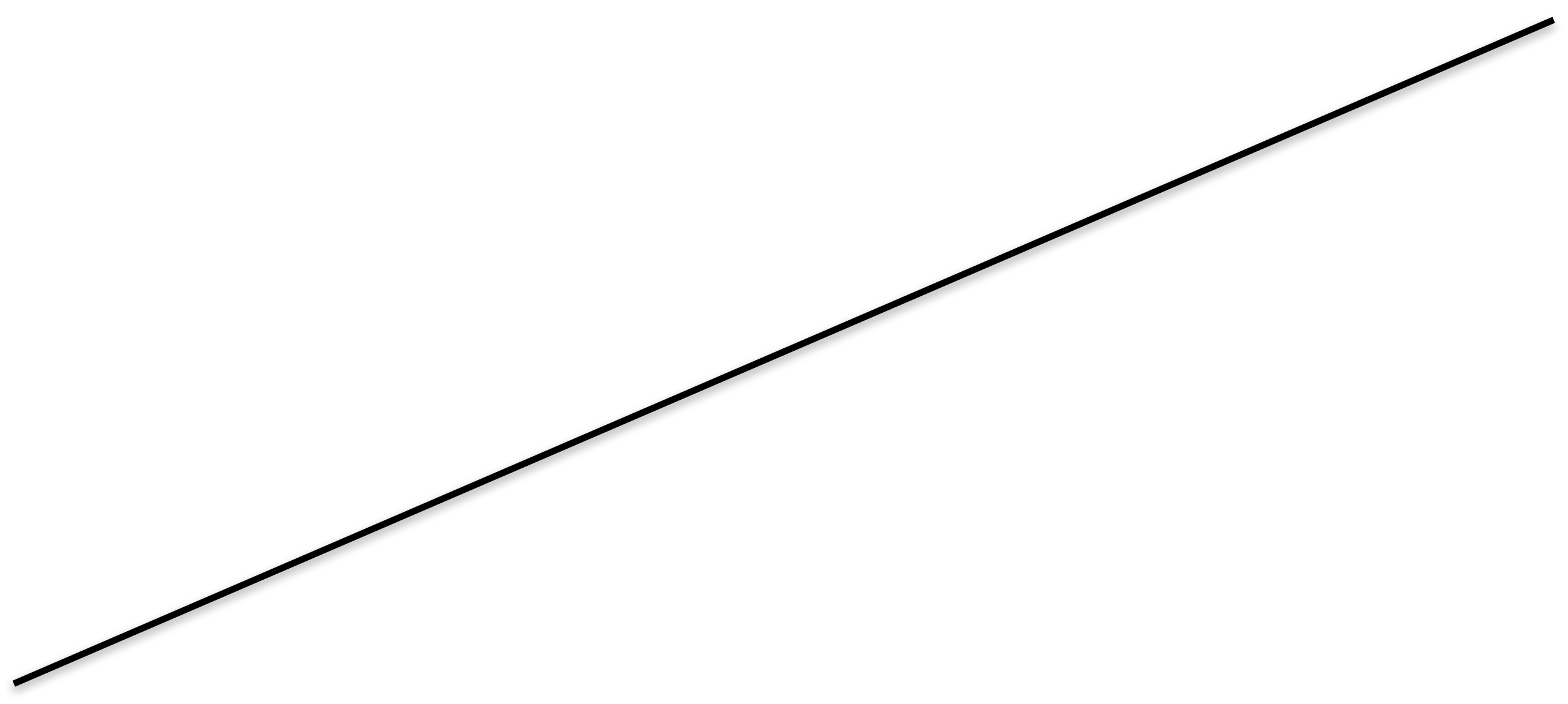
$$\text{Tax/Subsidy} = \text{Areas K} + \text{J}$$

PS





WL



Welfare Loss is lost  
CS and PS relative to  
equilibrium





Tax = Lost CS

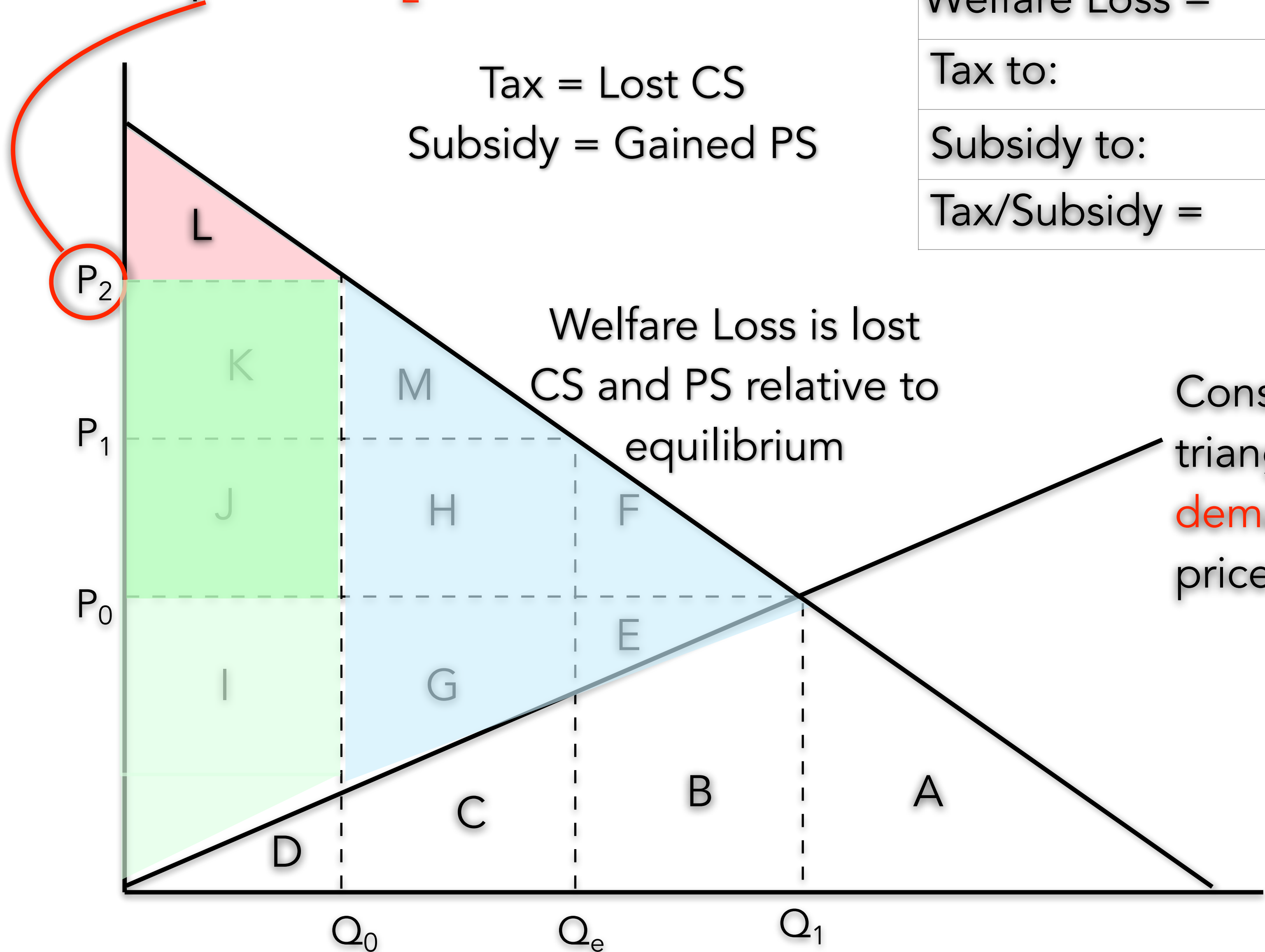
Subsidy = Gained PS

Tax to  
Consumer  
Subsidy to  
Producer



Example: Suppose  
the price is  $P_2$

Consumer Surplus =	Area L
Producer Surplus =	Areas K + J + I
Welfare Loss =	Areas M + H + G + F + E
Tax to:	Consumers who lose areas K+J
Subsidy to:	Producers who gain areas K+J
Tax/Subsidy =	Areas K + J



Tax = Lost CS  
Subsidy = Gained PS

Welfare Loss is lost  
CS and PS relative to  
equilibrium

Consumer Surplus = The  
triangle area **below** the  
**demand** line and **above** the  
price the consumer pays

Producer Surplus is the area  
**above** the **supply** line and  
**below** the price the  
producer receives

